



VIDEO CASSETTE RECORDER SERVICE MANUAL

MODEL:S909LP



NEXTVIEWLINK

CAUTION

BEFORE SERVICING THE UNIT, READ THE "SAFETY PRECAUTIONS"
IN THIS MANUAL.

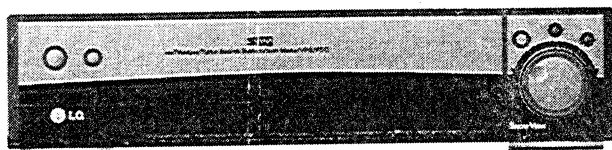


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(NOTE) The table of contents for this section is edited separately.

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SECTION 1 SUMMARY KEY TO ABBREVIATION

A	AC ACC ACSS ADJ A/E AFC AFT AGC A.H.SW ALC AM AMP ANT APC ASS'Y AUX	:Alternating Current :Automatic Color Control :Automatic Channel Setting System :Adjust :Audio Erase :Automatic Frequency Control :Automatic Fine Tuning :Automatic Gain Control :Audio Head Switch :Automatic Level Control :Amplitude Modulation :Amplifier :Antenna :Automatic Phase Control :Assembly :Auxiliary			
B	B BGP BPF BS BW or B/W	:Base :Burst Gate Pulse :Bandpass Filter :Broadcasting Satellite :Black and White			
C	C CAN CAP CAP.BRK CAP.RVS CATV CBA CCD C.CTL CFG CHROMA CNR COMB COMP	:Capacitor, Chroma, Collector :Cancel :Capstan :Capstan Brake :Capstan Revers :Cable Television :Circuit Board Assembly :Charge Coupled Device :Chro Control, Capstan Control :Capstan Frequency Generator :Chrominance :Chroma Noise Reduction :Combination :Comb Filter :Comparator :Composite :Compensation :Converter :Color Rotary Switch :Chip Select :Composite Synchronization :Cassette :Control Divide :Current :Cylinder			
D	D D.ADJ DC D.CTL DEMODO DET DEV DHP DIGITRON DL DOC DUB D/V SYNC	:Drum, Digital, Diode, Drain :Drum Adjust :Direct Current :Drum Control :Demodulator :Detector :Deviation :Double High Pass :Digital Display Tube :Delay line :Drop Out Compensator :Dubbing :Dummy Vertical Synchronization			
E	E EE EMPH ENA ENV EP EQ EXP	:Emitter :Electric to Electric :Emphasis :Enable :Envelope :Extended Play :Equalizer :Expander			
F	F FB FBC FE FF FG FL FM F/R FS FSC F/V	:Fuse :Feed Back :Feed Back Clamp :Full Erase :Fast Forward :Frequency Generator :Filter :Frequency Modulation :Front/Rear :Frequency Synthesizer :Subcarrier Frequency :Frequency Voltage			
G	GEN	:Generator			
H	H	:High, Horizontal			
I	IC IF INS	:Integrated Circuit :Intermediate Frequency :Insert			
L	L LD LV VTG CTL	:Low, Left, Coil :Loading :Loading Voltage Control			
M	LECHA LM LP MAX MD MECHA. CTL MIC MIN MIX MM MMV MOD MODEM MPX	:Letter Character :Level Meter :Long Play :Maximum :Modulator :Mechanism Control :Microphone :Minimum :Mixer, Mixing :Mono Multi Vibrator :Monostable, Multivibrator :Modulation, Modulator :Modulator-Demodulator :Multiplex			
N	NR	:Noise Reduction			
O	OSC OSD	:Oscillator :On Screen Display			
P	PB PCB P.CTL PER-AMP P.F PG PLL PREM.DET P.P PS PWM PWR CTL	:Playback :Printed Circuit Board :Power Control :Pre-amplifier :Power Failure :Pulse Generator :Phase Locked Loop :Premiere Detect :Peak-to-Peak :Phase Shift :Pulse Width Modulation :Power Control			
Q	Q QH QSR QTR QV	:Transistor :Quasi Horizontal :Quick Setting Record :Quick Timer Record :Quasi Vertical			
R	R RE(or RC) REC REC S. 'H' REF REG REMOCON:Remote Control(Unit) RF R/P RTC	:Resistor, Right :Remocon, Receiver :Recording :Record Start 'High' :Reference :Regulated, Regulator :Radio Frequency :Record/Playback :Reel Time Counter			
S	S S.ACCEL SAOP SC S.DET SH SHARP SIF SLD SN SP ST SUB SW or S/W SYNC SYSCON	:Serial :Slow Accel :Second Audio Program :Scat, Simulcast :Secam Detect :Shift :Sharpness :Sound Intermediate Frequency :Slide Locking :Signal to Noise Ratio :Standard Play :Stereo :Subtract, Subcarrier :Switch :Synchronization :System Control			
T	T TP TR TRK TRANS TU UHf UNREG	:Coil :Test Point :Transistor :Tracking :Transformer :Tuner, Take-Up :Ultra High Frequency :Unregulated			
V	V VA VCO VGC VHF V.H.SW VISS VPS VR V.SYNC VTG VV VXO	:Volt, Vertical :Always Voltage :Voltage Controlled Oscillator :Voltage Gain Control :Very High Frequency :Video Head Switch :VHS Index Search :Video Program System :Variable Resistor or Volume :Vertical Synchronization :Voltage :Voltage to Voltage :Voltage X-tal Oscillator			
W	W WHT W.O X-TAL	:Watt :White :With Out :Crystal			
X	X				
Y	Y/C YNR	:Luminance/Chrominance :Luminance Noise Reduction			
Z	ZD	:Zener Diode			

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, the products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

• Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.

2. Parts identified by the Δ symbol and shaded (■) parts are critical for safety.

Replace only with specified part numbers.

Note : Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.

3. Use Specified internal wiring. Note especially:

- 1) Wires covered with PVC tubing
- 2) Double insulated wires
- 3) High voltage leads

4. Use specified insulating materials for hazardous live parts. Note especially :

- 1) Insulation Tape
- 2) PVC tubing
- 3) Spacers
- 4) Insulation sheets for transistor

5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering. (Fig. 1)

6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

7. Check that replaced wires do not contact sharp edged or pointed parts.

8. When a power cord has been replaced, check that 10-15Kg of force in any direction will not loosen it. (Fig. 2)

9. Also check areas surrounding repaired locations.

10. Products using cathode ray tubes (CRTs)

In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the parts specified. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

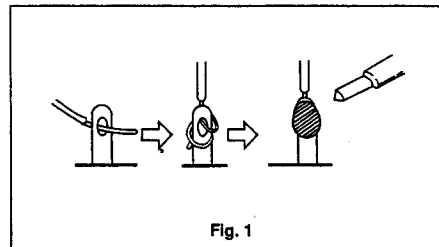


Fig. 1

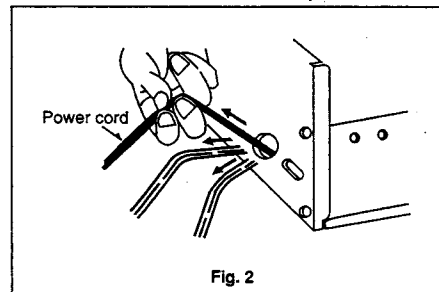


Fig. 2

SAFETY CHECK AFTER SERVICING

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

• Insulation resistance test

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

• Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

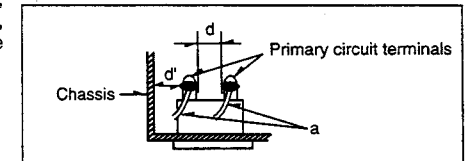


Fig. 3

• Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table below.

Table 1 : Ratings for selected areas

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance (d), (d')
* 110 to 130V 200 to 240V	Europe Australia	$\geq 10M\Omega/500V$ DC	4kV 1 minute	$\geq 6mm$ (d) $\geq 8mm$ (d') (a Power cord)

* Class II model only.

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

• Leakage Current test

Confirm specified or lower leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method : (Power ON)

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure and following table.

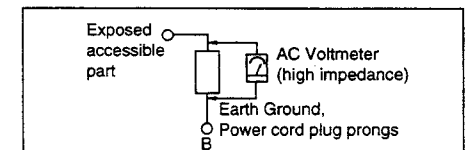


Fig. 4

Table 2 : Leakage current ratings for selected areas

AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to :
100 to 130V	Europe	$2k\Omega$	$i \leq 0.7m$ A peak $i \leq 2m$ A dc	Antenna earth terminals
200 to 240V	Australia	$50k\Omega$	$i \leq 0.7m$ A peak $i \leq 2m$ A dc	Other terminals

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

SPECIFICATIONS

General

Power	: 100-240V~, 50Hz.
Power consumption	: Approx. 27 watts (Energy saving mode:3 watts)
Video Head system	: Double azimuth 4 heads, helical scanning system
Tape speed	: 23.39 mm/sec (SP mode)/ 11.69mm/sec (LP mode)
Tape format	: Tape width 1/2" (12.7 mm high density VHS tape)
Maximum recording time	: 4 hours in SP mode/8 hours in LP mode (with E-240 tape)
Rewind time	: Approx. 150 sec. (with E-180 tape)
Dimensions (W X H X D)	: 14.2" X 3.6" X 11.8" (360 X 92 X 290 mm)
Weight	: 9.0lbs. (4.1 kg)
Operating temperature	: 41° F-95° F (5° C-35° C)
Operating humidity	: Less than 80%
Timer	: 24 hours display type

Video

Television system	: CCIR standard (625 lines, 50 fields) PAL/SECAM colour signal
Recording format	: PAL/MESECAM
RF reception	: PAL B/G, SECAM B/G
RF OUT	: PAL G
Input level	: VIDEO IN (Scart, RCA type) 1.0 Vp-p, 75 ohm, unbalanced
Output level	: VIDEO OUT (Scart type) 1.0Vp-p, 75 ohm, unbalanced
Signal to noise ratio	: More than 43 dBm

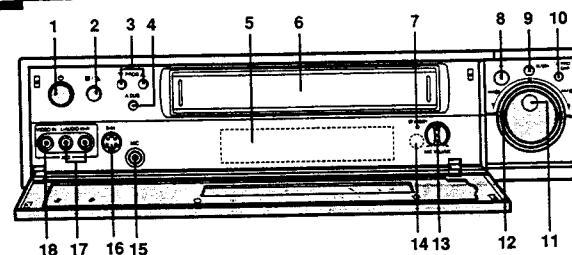
Audio

Input level	: AUDIO IN (Scart, RCA type) Scart type: 0 dBm, more than 10 k Ω RCA type : -6.0 dBm, more than 47 k Ω
Output level	: AUDIO OUT (Scart, RCA type) Scart type : 0 dBm, less than 1 k Ω RCA type : -6.0 dBm, less than 1 k Ω
Audio track	: Mono track & Hi-Fi track
Audio frequency response	: Normal: 100 Hz-10kHz (-6/+3) Hi-Fi: 20 Hz-20 kHz (-3/+3 dB)
Audio signal to noise ratio	: Hi-Fi audio: More than 75 dB (JIS A filter)
Audio dynamic range	: Hi-Fi audio: More than 80 dB (JIS A filter)

● Design and specifications are subject to change without notice!

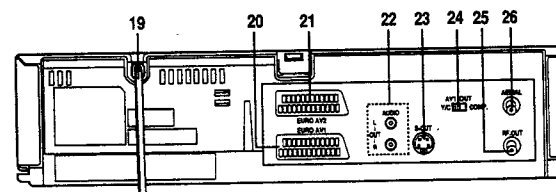
LOCATION OF CUSTOMER CONTROLS

FRONT



- | | |
|------------------------------------|---------------------------------|
| 1. $\odot$ POWER | 10. REC/QSR |
| 2. STOP/EJECT | 11. JOG DIAL |
| 3. PROG. (∇/Δ) | 12. SHUTTLE RING |
| 4. A.DUB | 13. MIC VOLUME |
| 5. MULTI FUNCTION DISPLAY | 14. REMOTE CONTROL SENSOR |
| 6. VIDEO CASSETTE COMPARTMENT | 15. MIC |
| 7. STANDBY INDICATOR | 16. S-IN |
| 8. $\triangleright$ PLAY | 17. AUDIO INPUT TERMINALS (L/R) |
| 9. $\blacksquare$ $\triangleright$ | 18. VIDEO INPUT TERMINAL |

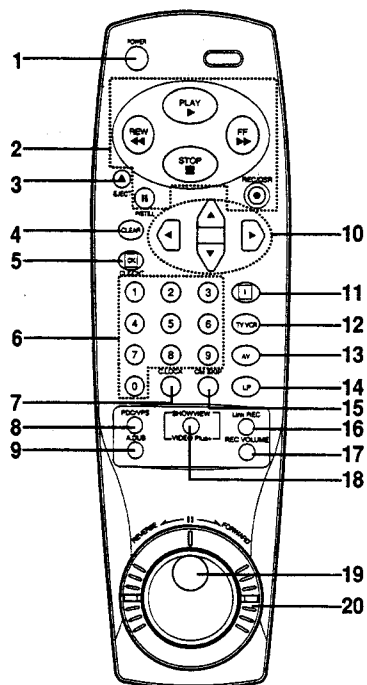
REAR



- | | |
|-------------------------------|--------------------------|
| 19. MAINS LEAD | 23. S-OUT |
| 20. EURO AV1 | 24. AV1 OUT (Y/C, COMP.) |
| 21. EURO AV2 | 25. RF OUT |
| 22. AUDIO OUT TERMINALS (L/R) | 26. AERIAL |

LOCATION OF CUSTOMER CONTROLS

REMOTE CONTROL



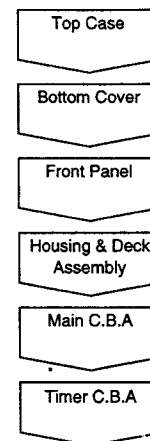
- | | |
|---|---------------------------|
| 1. POWER | 11. i |
| 2. BASIC OPERATION BUTTONS | 12. TV/VCR |
| 3. EJECT | 13. AV MODE |
| 4. CLEAR | 14. TAPE SPEED SELECT(LP) |
| 5. OK/CLOCK/TAPE COUNTER/
TAPE REMAINING | 15. CM SKIP |
| 6. NUMBER BUTTONS | 16. Link REC |
| 7. CHILD LOCK | 17. REC VOLUME |
| 8. PDC/VPS | 18. SHOWVIEW |
| 9. A.DUB | 19. JOG DIAL |
| 10. CURSORS (▲, ▼, ◀, ▶) | 20. SHUTTLE RING |

SECTION 2 CABINET & MAIN FRAME

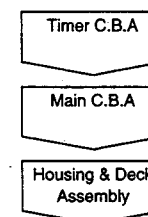
SERVICE METHOD

Electrical Part

(1) Disassembly Flow



(2) Re-assembly Flow service like Fig. 2-1



(3) To check and replace Electrical parts

- ① Disassemble the unit according to No.1) Disassembly Flow.
- ② Re-assemble the unit according to No.2) Re-assembly Flow.
- ③ Place the unit like Fig. 2-1.
- ④ Check and replace Electrical parts.

Note :

- ① Insert Video Cassette Tape inversely like Fig. 2-1 to check and replace defective parts.
- ② In disassembling and reassembling, be careful not to damage CST switch.

(Positioned Upside Down)

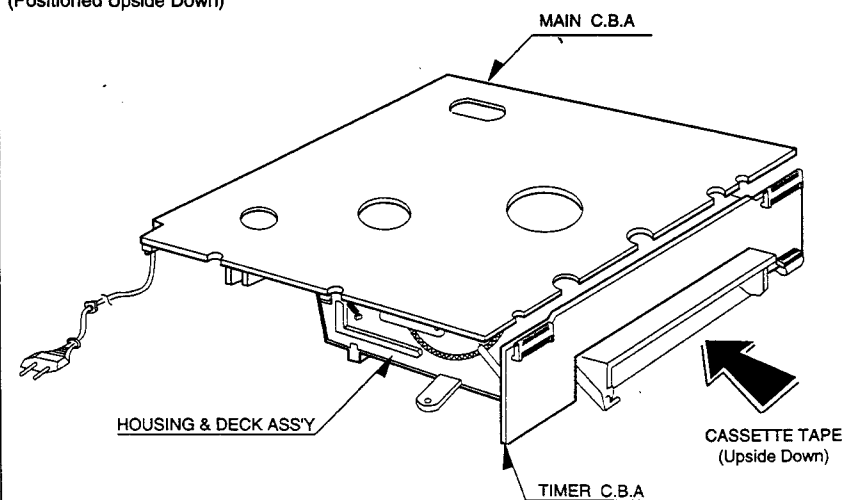


Fig. 2-1

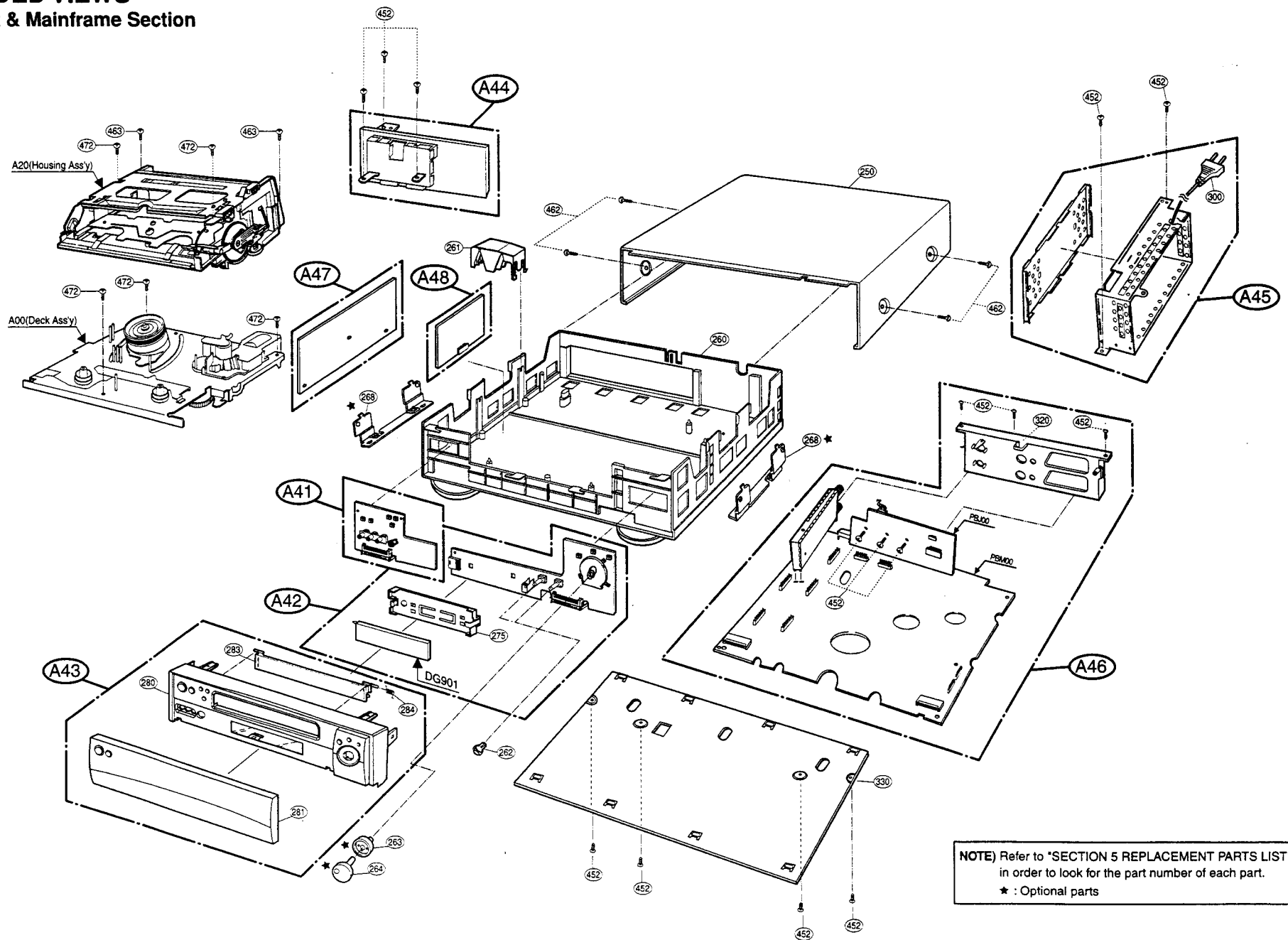
• Cabinet & Main Frame Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
ASSEMBLY PARTS SECTION						
		A41	3501R-1062A	BOARD ASSY	KEY BOARD	
		A42	3501R-1061F	BOARD ASSY	TIMER	
		A43	3721R-F024K	PANEL ASSY,FRONT[NORMAL PARTS]	S909LP 3GL1L	
		A44	3501R-1064A	BOARD ASSY	PRE-AMP	
		A45	3501R-1063A	BOARD ASSY	SMPS	
		A46	3501R-1057E	BOARD ASSY	MAIN(S909LP)	
		A47	6871R-1059B	PWB(PCB) ASSY	Y/CBOARD	
		A49	6871R-1060A	PWB(PCB) ASSY	MPX BOARD	
PARTS SECTION						
		250	3110R-0030A	CASE	TOP	
		260	3210R-0009B	FRAME	MAIN	NSP
		261	4930R-0023A	HOLDER	TUNER	
		262	4940R-V003A	KNOB	VOLUME	
		263	4940R-Z004B	KNOB	SHUTTLE(UVP-H396G)	
		264	4940R-Z003B	KNOB	JOG(UVP-H396G)	
		275	4930R-0024A	HOLDER	DIGITRON	
		280	3720R-F020B	PANEL	FRONT	NSP
		281	3551R-0007H	COVER ASSY	DOOR	NSP
		283	3580R-0022T	DOOR	CST	
		284	442-681A	SPRING	DOOR	
		300	6410RCL002B	POWER CORD	DW5000E(FILTER) DONGWON VDE 21	
		320	3721R-D015D	PANEL ASSY,DISTRIBUTOR[NORMAL		
		330	3550R-0159A	COVER	BOTTOM	
SCREW						
		452	353-051A	SCREW	SPECIAL	
		462	353-136A	SCREW	SPECIAL(FBK) (353S353A)	
		463	1MBC0302418	BINDING HEAD MACHINE SCREW +	D 3.0 L 8.0 MSWR3/FZY	
		472	353-051E	SCREW	SPECIAL (3X12)	

EXPLODED VIEWS

1. Cabinet & Mainframe Section



NOTE) Refer to "SECTION 5 REPLACEMENT PARTS LIST" in order to look for the part number of each part.
* : Optional parts

A

B

C

2-3

D

E

2-4

F

G

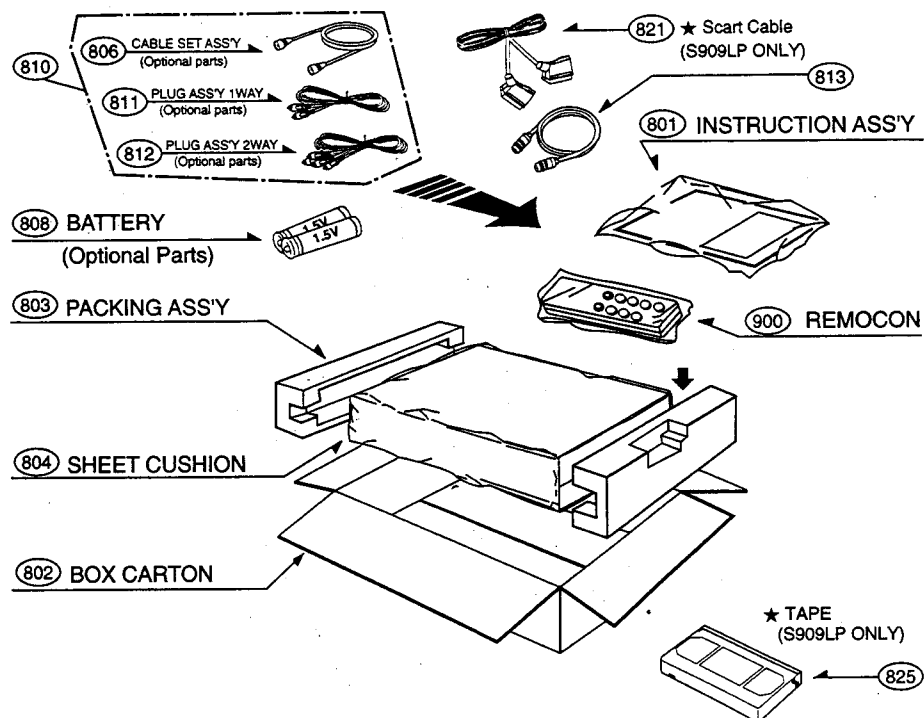
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EXPLODED VIEWS

2. Packing & Accessory Section

NOTE) Refer to "SECTION REPLACEMENT PARTS LIST" in order to look for the part number of each part.

★ Optional Parts



• Packing Accessory Section

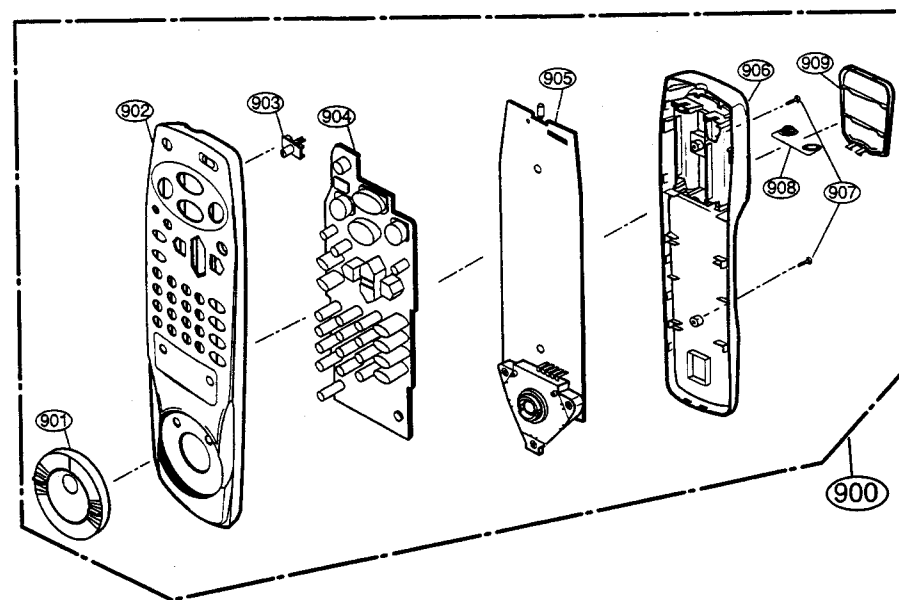
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NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		801	3835RP0031H	INSTRUCTION ASSY	S909LP 3GL1L	NSP NSP
		802	3890R-H125A	BOX	S909LP 3GL1L SW3-A 1.095 2 FLX	
		803	3920R-0063A	PACKING	0.02 107 EPS 10 768 1596	
	OR	804	292-053B	BAG	SOFT(MIDI)	
		804	3858R-0006A	SHEET	ROLL(W630XL300MX0.5T)	
		806	861-033B	CABLE SET ASSY	RF-CABLE ASSY FTZ (D.D)	
		808	534-008C	BATTERY	AAAM(R03) 1.5V 1PAIR(LOCAL)	
		810	861-505K	CABLE SET ASSY	RF-CABLE ASSY PAL HI-FI FTZ	
		811	564-011B	PLUG ASSY	PHONO CORD 1WAY (YL)	
		812	564-018B	PLUG ASSY	PHONO CORD 2WAY (RD/WH)	
		813	683-002B	CABLE	S-VHS CORD SUAHN	
		821	861-045C	CABLE, COAXIAL	SCART+SCART CABLE (DONGDO)	
		825	453-100K	TAPE (CIRC)	S-VHS TAPE (PAL E-180)	

EXPLODED VIEWS

2. Remote Control Section



• Remote Control Section

RUN DATE : 98.11.19

NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		900	6711R2P004A	REMOTE CONTROLLER ASSY	J4	

SECTION 3 ELECTRICAL

ELECTRICAL ADJUSTMENT PROCEDURES

1. Sepa Ref Voltage Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E	TP1	01	$1.2 \pm 0.01V$	D.V.M

- ① Connect the Digital Voltage Meter to the TP1 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 01 on the digitron, press the right or left key on the remocon.
- ④ Adjust the DC Voltage to $1.2 \pm 0.01V$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

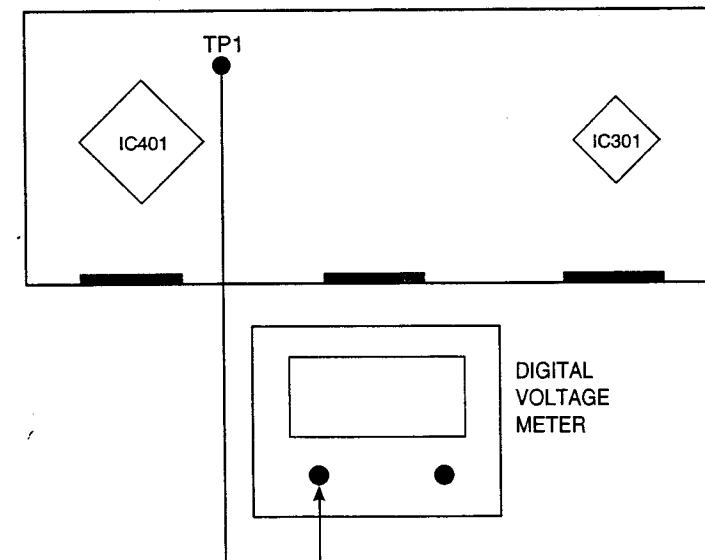


Figure 3-1

ELECTRICAL ADJUSTMENT PROCEDURES

2. E-E Video Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E	TP2	02	$2.05 \pm 0.05\text{Vp-p}$	SCOPE

- ① Connect the scope to the TP2 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time
- ③ To display the number of 02 on the digitron, press the right or left key on the remocon.
- ④ Adjust the video level to $2.05 \pm 0.05\text{Vp-p}$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

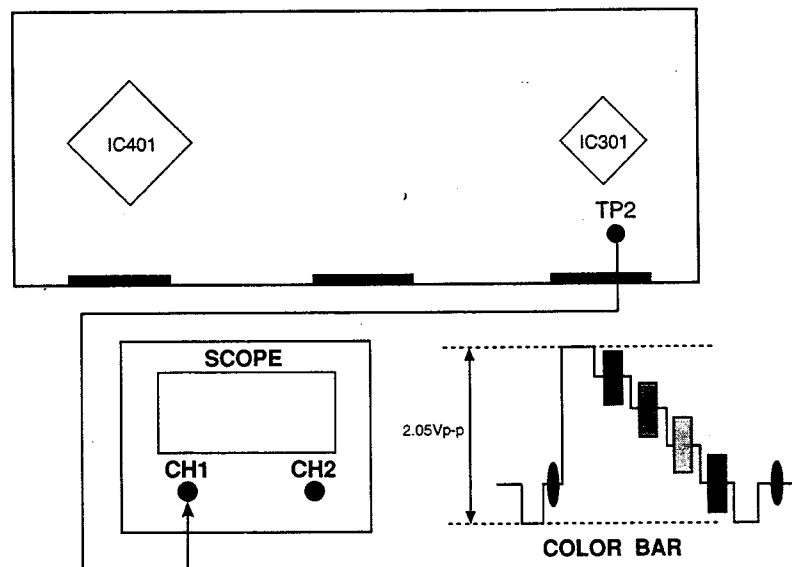


Figure 3-2

ELECTRICAL ADJUSTMENT PROCEDURES

3. S-VHS PB Level Adjustment

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
PB S-VHS	TP2	03	$2.1 \pm 0.05\text{Vp-p}$	SCOPE

- ① Connect the scope to the TP2 as shown below.
- ② Play the S-VHS SP test tape.
- ③ To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ④ To display the number of 03 on the digitron, press the right or left key on the remocon.
- ⑤ Adjust the V.OUT level to $2.1 \pm 0.05\text{Vp-p}$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

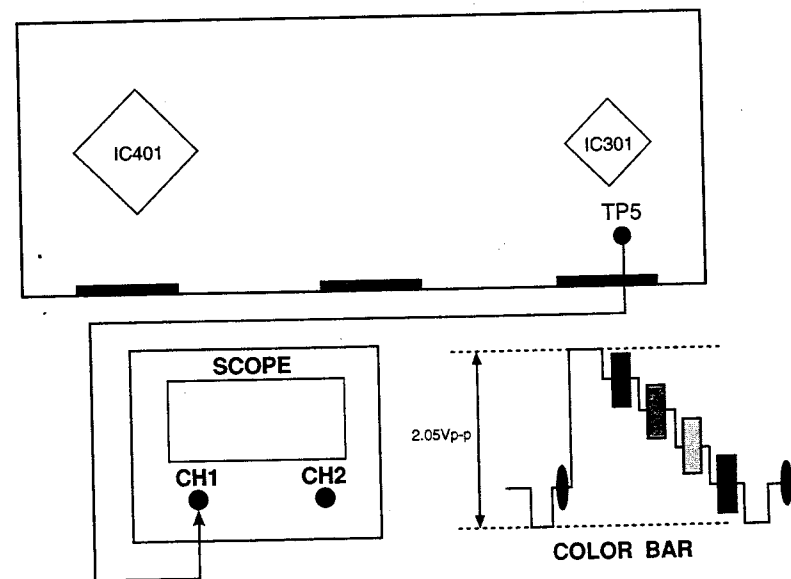


Figure 3-3

ELECTRICAL ADJUSTMENT PROCEDURES

4. VHS PB Level Adjustment

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
PB VHS	TP2	03	$2.05 \pm 0.05V_{p-p}$	SCOPE

- ① Connect the scope to the TP2 as shown below.
- ② Play the VHS SP test tape.
- ③ To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ④ To display the number of 03 on the digitron, press the right or left key on the remocon.
- ⑤ Adjust the V.OUT level to $2.05 \pm 0.05V_{p-p}$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

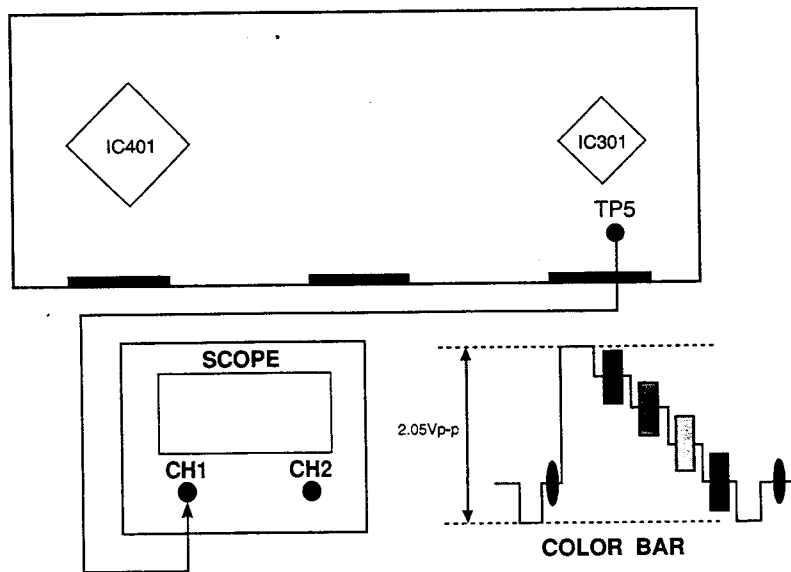


Figure 3-4

ELECTRICAL ADJUSTMENT PROCEDURES

5. LC VCO Level Adjustment

MODE	TEST POINT	Adjustment Point	SPECIFICATION	TEST EQUIPMENT
PB VHS	IC301 PIN8	FL301	$2.5 \pm 0.1V$	D.V.M

- ① Connect the Digital Voltage Meter to the IC301 PIN8 as shown below.
- ② Playback a VHS SP Test tape and vary FL301 so that the DC voltage of IC301 PIN8 is to be $2.5 \pm 0.1V$.

Y/C BOARD Solder Side

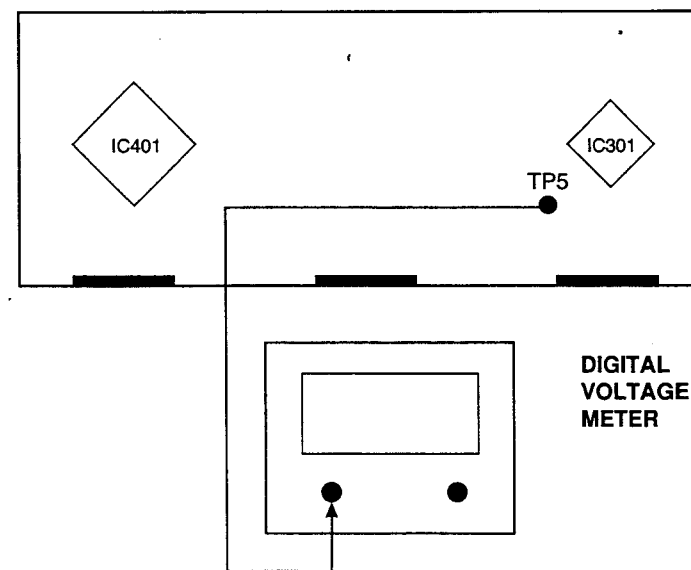


Figure 3-5

ELECTRICAL ADJUSTMENT PROCEDURES

6. Sub-Emphasis Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E	TP3	06	$0.4 \pm 0.05V_{p-p}$	SCOPE

- ① Connect the scope to the TP3 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 06 on the digitron, press the right or left key on the remocon.
- ④ Adjust the level to $0.4 \pm 0.05V_{p-p}$, pressing the tracking (CH) up and down key on the remocon.

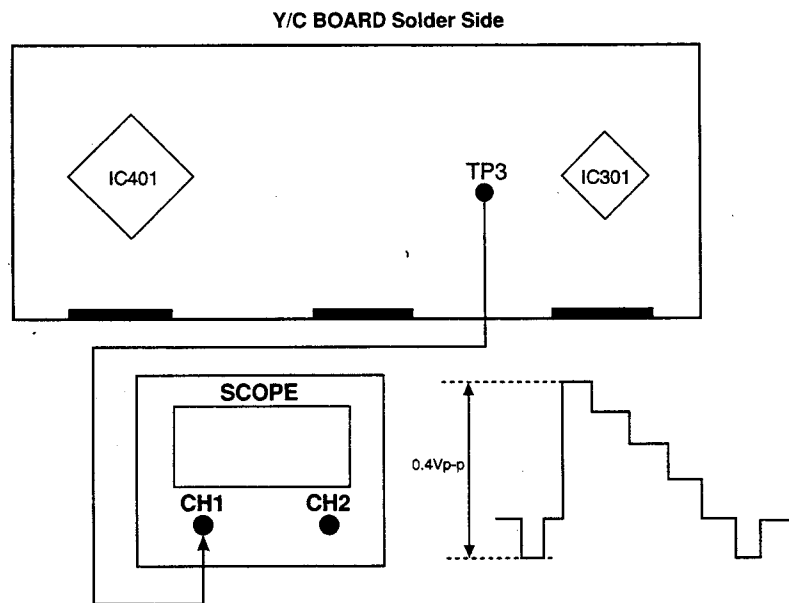


Figure 3-6

ELECTRICAL ADJUSTMENT PROCEDURES

7. S-VHS White Clip Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E S-VHS	TP4	04	$210 \pm 10\%$	SCOPE

- ① Connect the Scope to the TP4 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 04 on the digitron, press the right or left key on the remocon.
- ④ Adjust the Clip Level to $210 \pm 10\%$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

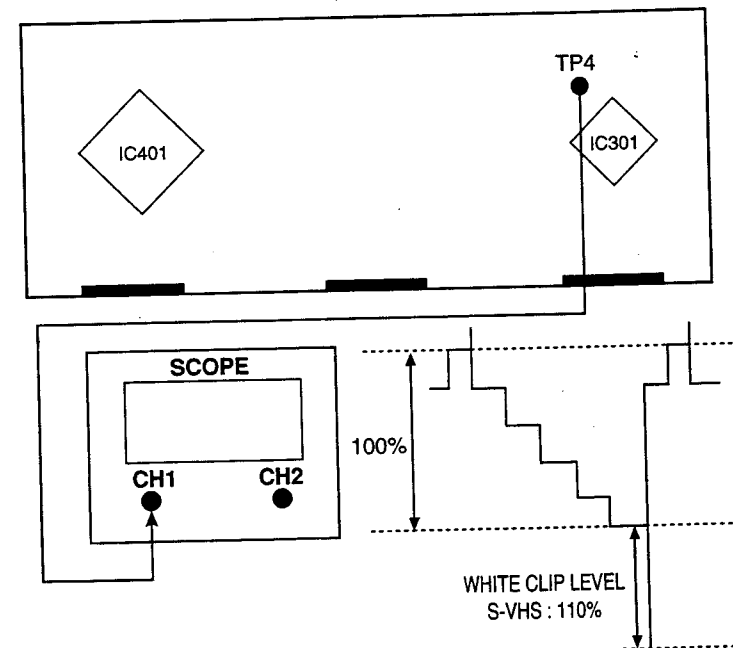


Figure 3-7

ELECTRICAL ADJUSTMENT PROCEDURES

8. VHS White Clip Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E VHS	TP4	04	$190 \pm 10\%$	SCOPE

- ① Connect the Scope to the TP4 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 04 on the digitron, press the right or left key on the remocon.
- ④ Adjust the Clip Level to $190 \pm 10\%$, pressing the tracking (CH) up and down key on the remocon.

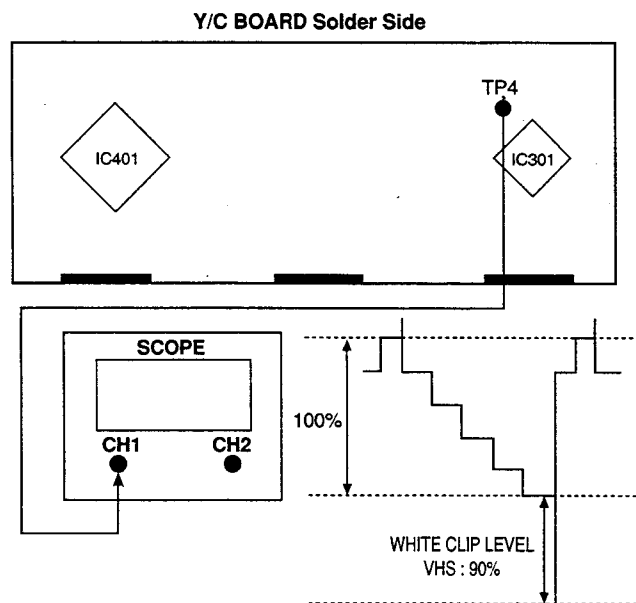


Figure 3-8

ELECTRICAL ADJUSTMENT PROCEDURES

9. S-VHS Carrier Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E S-VHS	TP5	05	$5.4 \pm 0.05\text{MHz}$	MODEM TEST TEST

- ① Connect the Modem Test to the TP5 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 05 on the digitron, press the right or left key on the remocon.
- ④ Adjust the waveform to $5.4 \pm 0.05\text{MHz}$, pressing the tracking (CH) up and down key on the remocon.

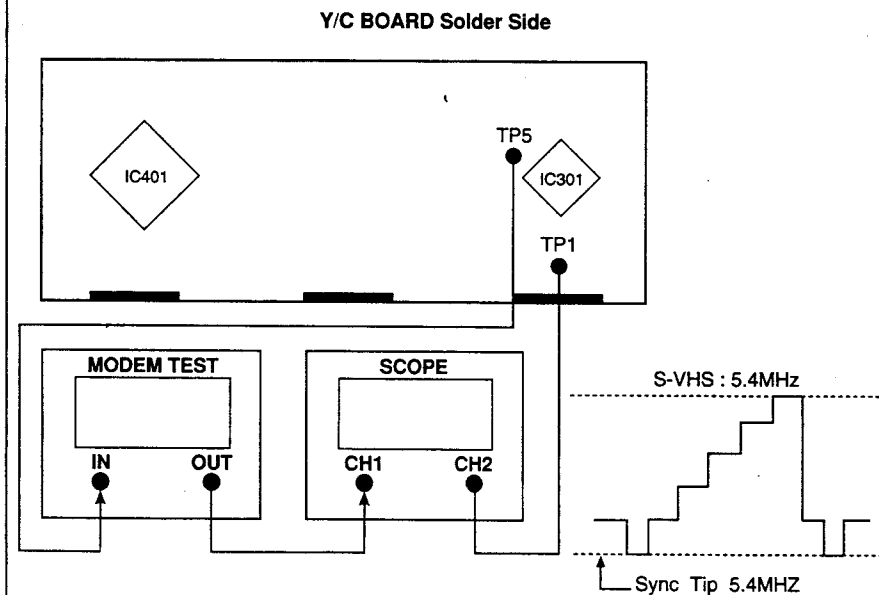


Figure 3-9

ELECTRICAL ADJUSTMENT PROCEDURES

10. S-VHS Deviation Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E S-VHS	TP5	06	$1.6 \pm 0.05\text{MHz}$	MODEM TEST

- ① Connect the Modem Test to the TP5 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 06 on the digitron, press the right or left key on the remocon.
- ④ Adjust the waveform to $1.6 \pm 0.05\text{MHz}$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

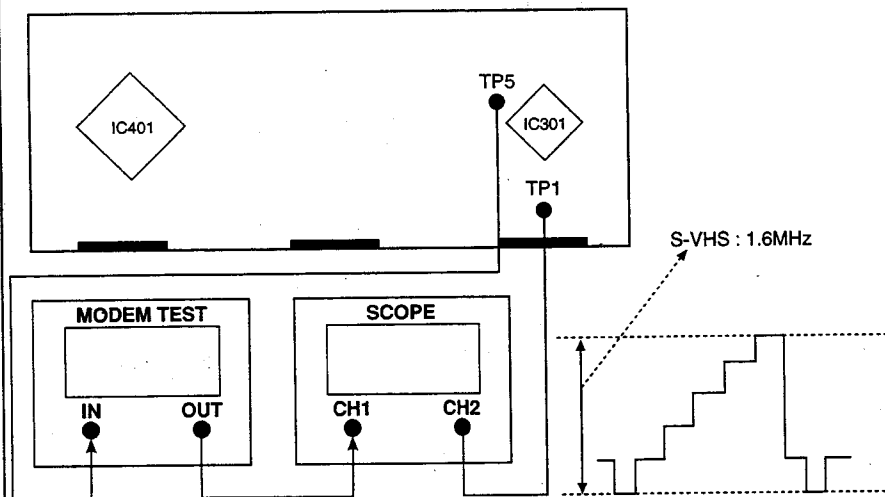


Figure 3-10

ELECTRICAL ADJUSTMENT PROCEDURES

11. VHS Carrier Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E VHS	TP5	05	$3.8 \pm 0.05\text{MHz}$	MODEM TEST

- ① Connect the Modem Test to the TP5 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 05 on the digitron, press the right or left key on the remocon.
- ④ Adjust the waveform to $3.8 \pm 0.05\text{MHz}$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

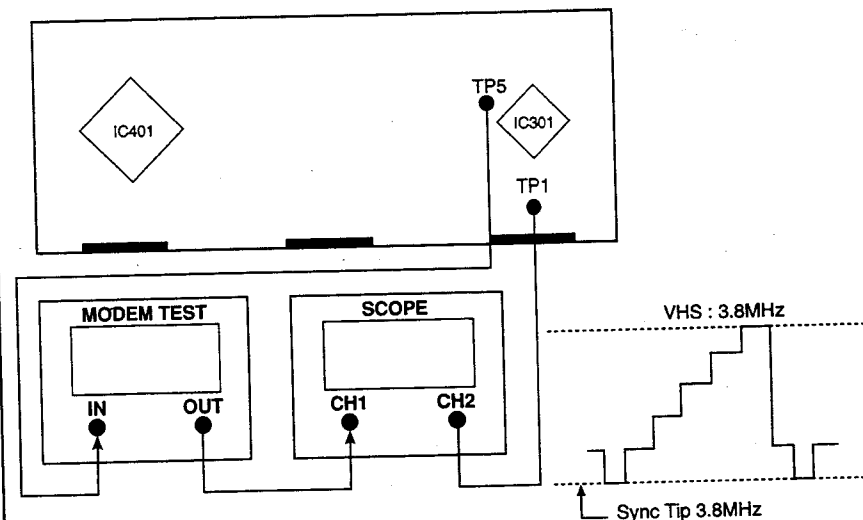


Figure 3-11

ELECTRICAL ADJUSTMENT PROCEDURES

12. VHS Deviation Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E VHS	TP5	06	$1.0 \pm 0.05\text{MHz}$	MODEM TEST

- ① Connect the Modem Test to the TP5 as shown below.
- ② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.
- ③ To display the number of 06 on the digitron, press the right or left key on the remocon.
- ④ Adjust the waveform to $1.0 \pm 0.05\text{MHz}$, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

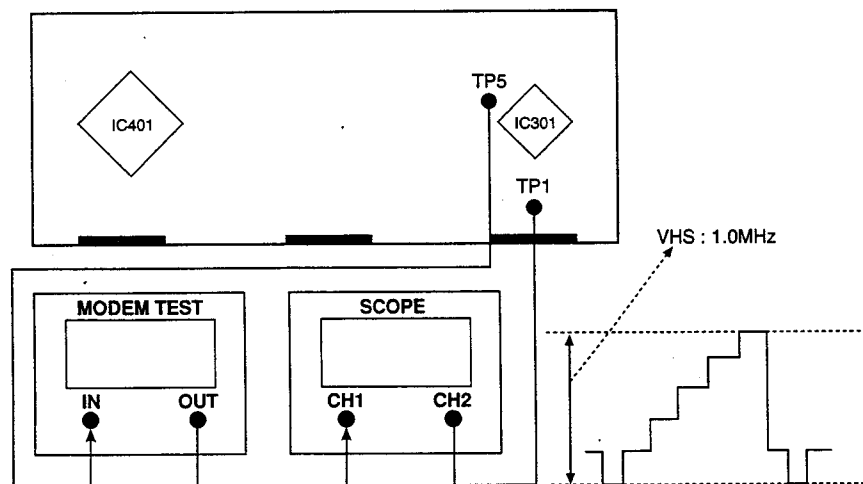


Figure 3-12

ELECTRICAL ADJUSTMENT PROCEDURES

13. Servo Adjustment

1) PG Adjustment

● TEST EQUIPMENT

- a) OSCILLOSCOPE
- b) PAL TEST TAPE (VHS SP)

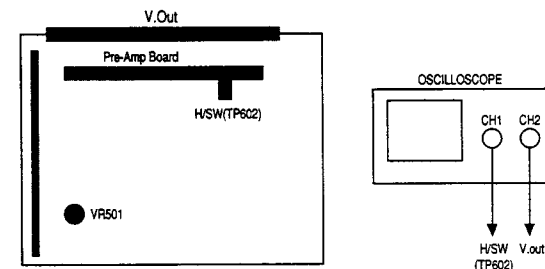
● ADJUSTMENT AND SPECIFICATION

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(TP602)	VR501	$7.5 \pm 0.5\text{H}$

● ADJUSTMENT PROCEDURE

- a) Insert the PAL SP Test Tape and play.
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the "ATR" is blink after the PAL SP Test Tape is inserted.
- b) Connect the CH1 of the oscilloscope to the H.SW (TP602) and CH2 to the Video Out for the VCR.
- c) Trigger the mixed Video Signal of CH2 to the CH1 H.SW, and then check the distance (time difference), which is from the selected A(B) Head point of the H.SW signal to the starting point of the vertical synchronized signal, to 7.5H (480uS)

● CONNECTION



● WAVEFORM

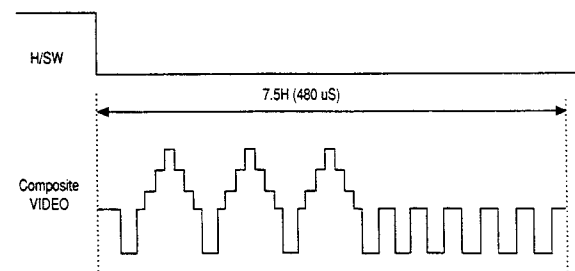


Figure 3-13

CONNECTION

ELECTRICAL ADJUSTMENT PROCEDURES

14. Audio Adjustment

1. Normal Audio Rec Bias Adjustment

● TEST EQUIPMENT

- a) LEVEL METER
- b) RECORD TAPE

● ADJUSTMENT or SPECIFICATION

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
REC	W809 W810	VR801	$3.0\text{mV} \pm 0.1\text{mV}$

● ADJUSTMENT PROCEDURE

- a. Connect the AC Millivolt Meter to the W809 and W810 in the record mode without signal.
- b. Adjust the voltage to $3.0 \pm 0.1\text{mVrms}$ with VR801 at this time.

● CONNECTION

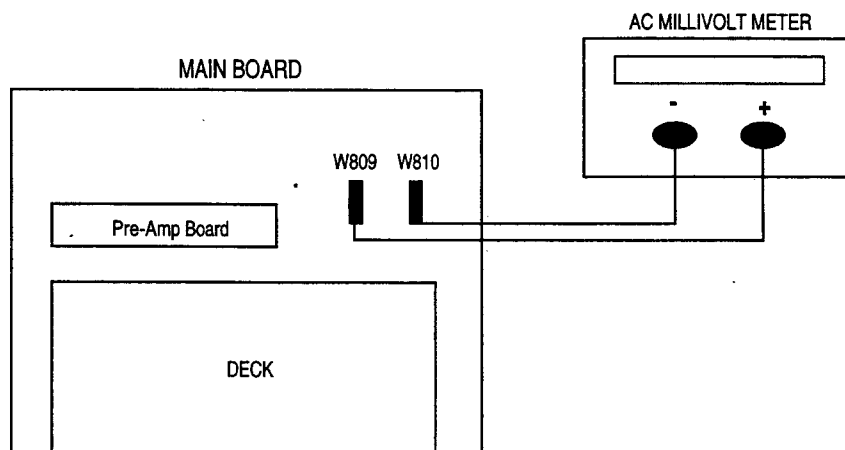


Figure 3-14

ELECTRICAL ADJUSTMENT PROCEDURES

15. Stereo Separation Adjustment

1) Normal Audio Bias Adjustment

● TEST EQUIPMENT

- a) OSCILLOSCOPE

● ADJUSTMENT AND SPECIFICATION

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
CH09 Central Signal Stereo Mode	RCA Out L/R	VR752	Adjust the Audio Level for RCA Out L CH to 10mV-20mV the VR752.

● ADJUSTMENT PROCEDURE

- a. Receive the Stereo Mode from the CH09 central signal.
- b. Connect the RCA Out L/R to the oscilloscope.
- c. Adjust the signal value of the L CH(RCA Out) to within the range of 10mV-20mV with the VR752.

● CONNECTION

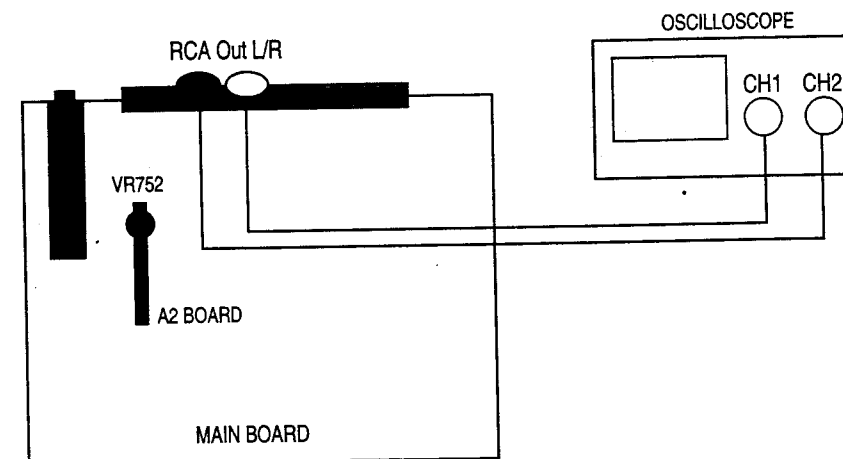
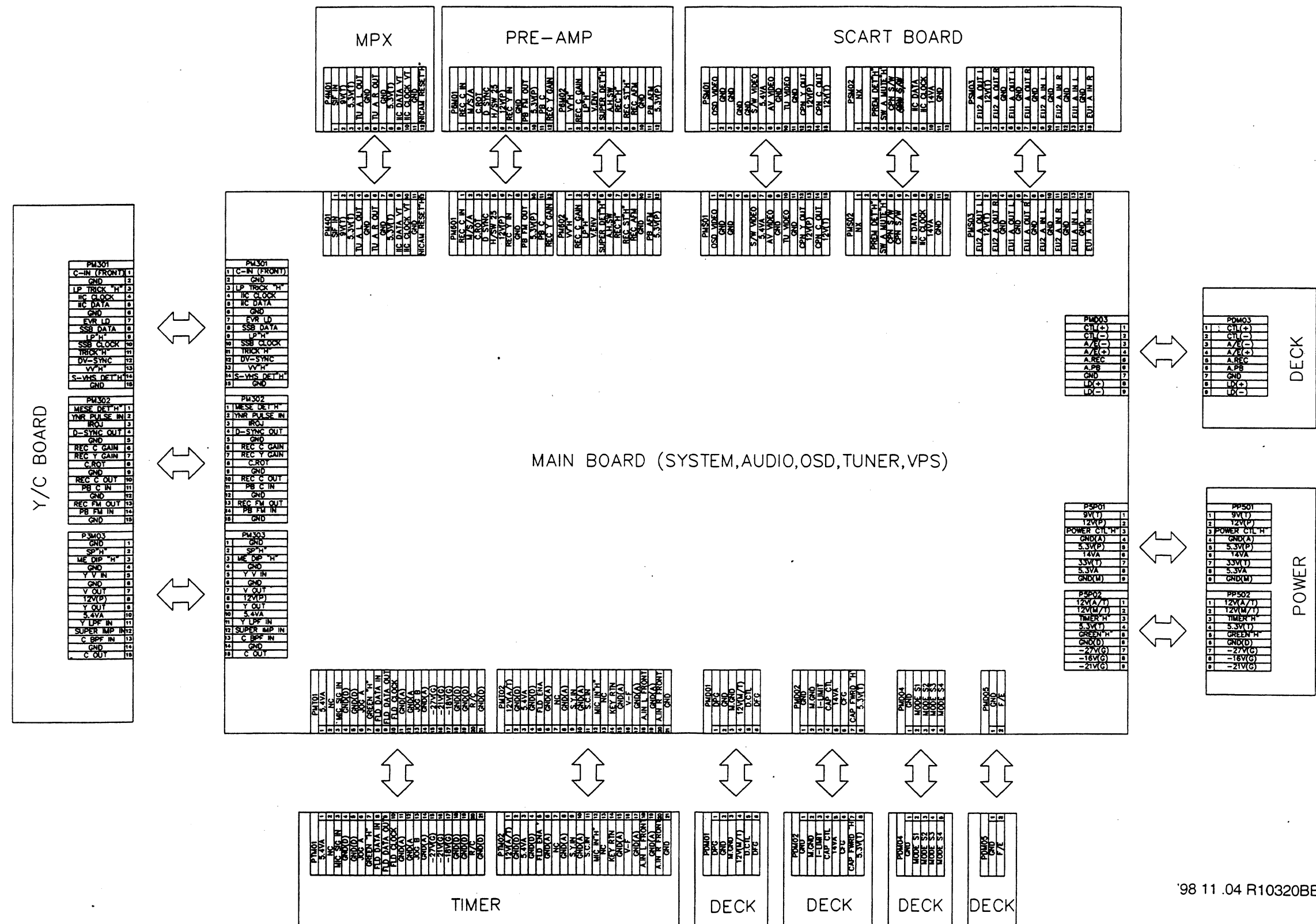


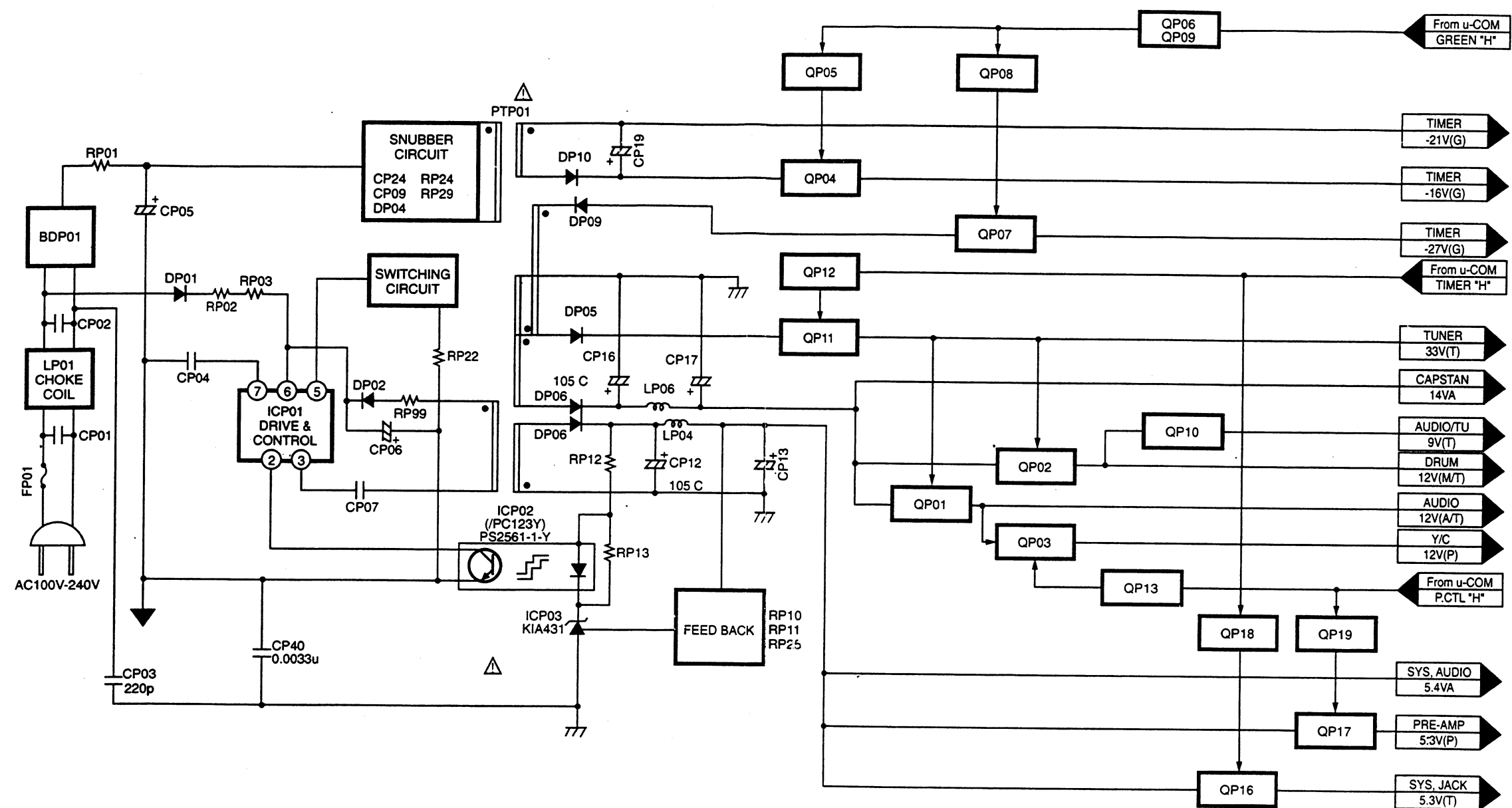
Figure 3-15

1. Overall Wiring Diagram



'98 11 .04 R10320BE

2. Power (SMPS) Block Diagram



★ POWER TR Voltage Sheet

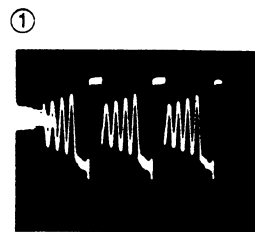
Port	Emitter		Collector		Base	
	PB	REC	PB	REC	PB	REC
QP01	12.12	12.12	13.73	13.73	13.25	13.25
QP02	12.11	12.11	13.73	13.73	13.24	13.24
QP03	12.01	12.01	12.01	12.01	11.32	11.32
QP04	-15.7	-15.7	-15.6	-15.6	-15.0	-15.0
QP05	5.3	5.3	5.2	5.2	0.0	0.0
QP06	0.0	0.0	0.0	0.0	3.9	3.9
QP07	-28.8	-28.8	-28.1	-28.1	-28.7	-28.7
QP08	5.3	5.3	5.2	5.2	0	0
QP09	0.0	0.0	3.9	3.9	0.0	0.0
QP10	9.31	9.31	12.1	12.1	9.93	9.93
QP11	35.2	35.2	35.1	35.1	34.5	34.5
QP12	0.0	0.0	0.0	0.0	0.7	0.7
QP13	0.0	0.0	0.0	0.0	0.7	0.7
QP16	5.3	5.3	5.2	5.2	4.5	4.5
QP17	5.31	5.31	5.29	5.29	4.57	4.57
QP18	0.0	0.0	0.0	0.0	0.73	0.73
QP19	0.0	0.0	0.0	0.0	0.73	0.73

★ POWER IC Voltage Sheet

PB(REC)				PB(REC)				PB(REC)			
1.90	13.4	1.98	3.3	4.93	3.91	0.0	3.9	2.5	0.0	3.9	
(3.3)	(1.99)	(13.6)	(1.98)	(4.94)	(3.91)	(0.0)	(3.9)	(2.5)	(0.0)	(3.9)	
ICP01 (KA7552)				ICP02				ICP03			
8		5		1		4		1		3	
1		4									
(1.90)	(1.02)	(0.01)	(0.0)								

★ POWER Oscilloscope Waveform

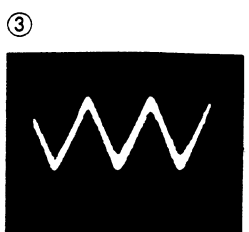
'98 11 .04 R10317BA



0.5V/div, 5us/div



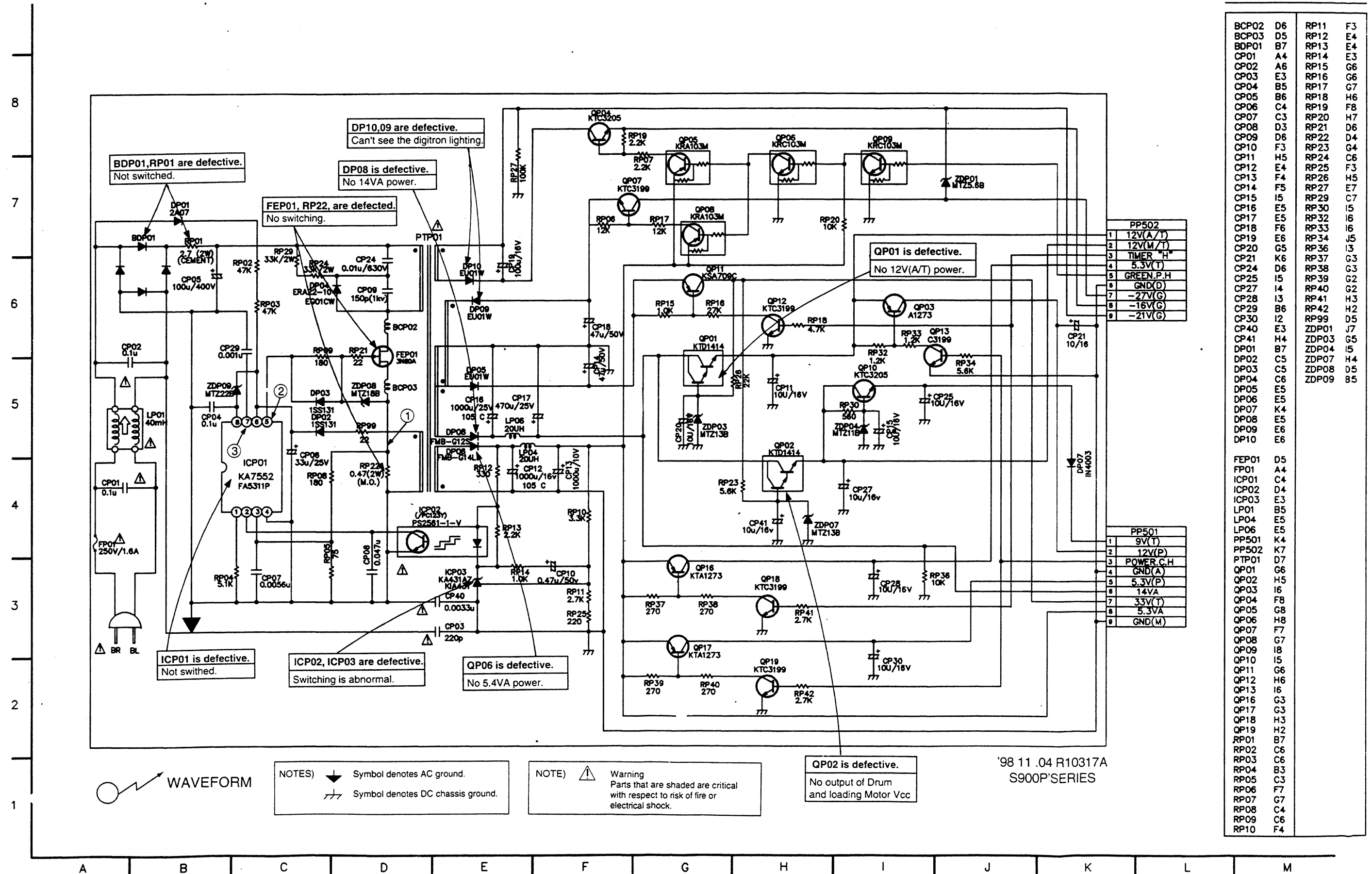
ICP01 Pin⑤
0.5V/div, 5us/div



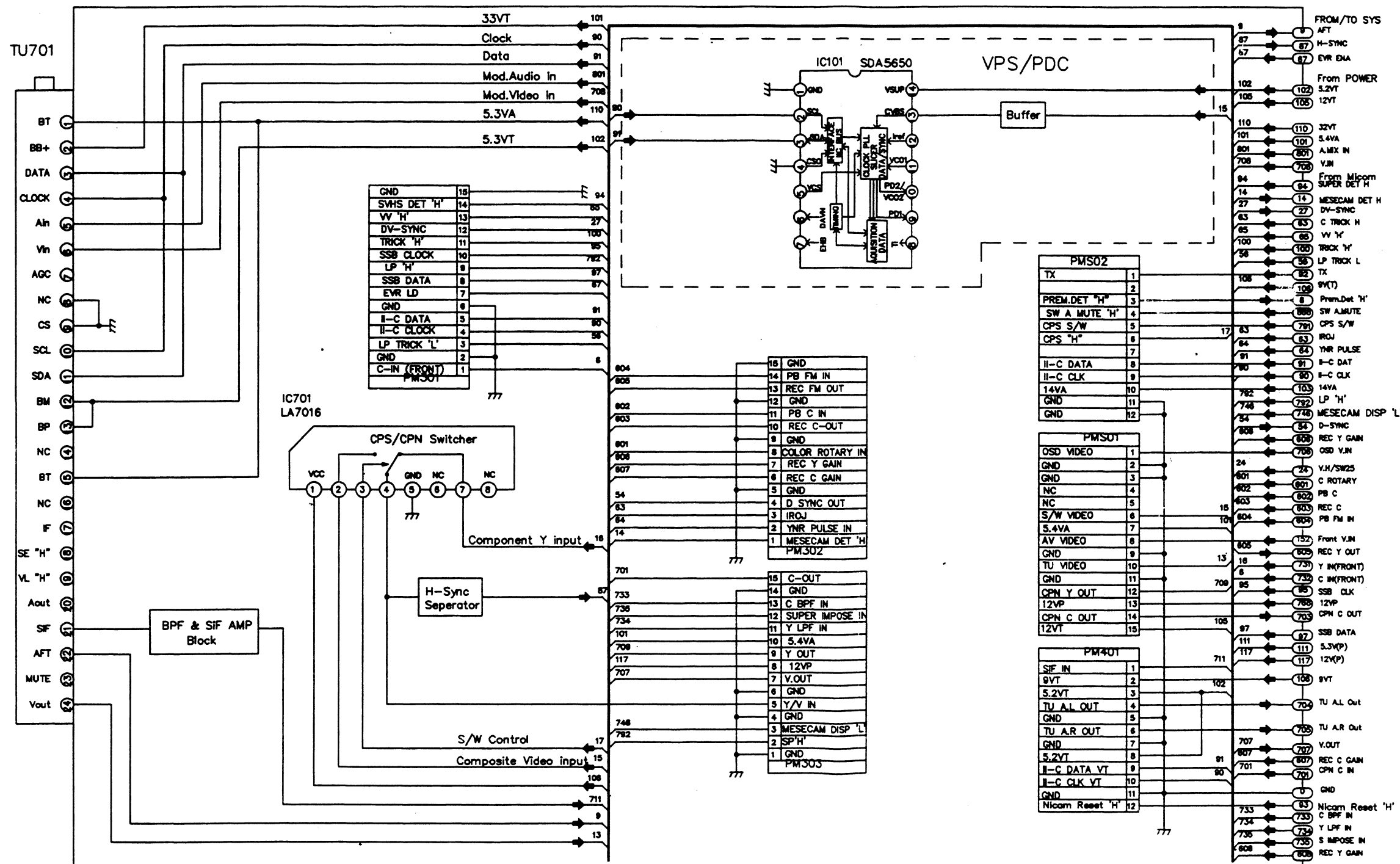
ICP01 Pin⑦
50V/div, 50us/div

2. Power (SMPS) Circuit Diagram

LOCATION GUIDE



3. Tuner/IF & VPS/PDC Block Diagram



★ Tu/IF & VPS/PDC TR Voltage Sheet

(EE MODE)			
Port No.	Emitter	Base	Collector
Q702	3.1	3.7	3.5
Q703	5.2	5.0	3.5
Q704	0	0	2.5
Q706	0.3	1	3.4
Q707	0	0	4.0
Q101	2.5	2.5	2.5
Q102	0	5.2	0
Q103	1.3	1.8	5.2

★ Tu/IF & VPS/PDC IC Voltage Sheet

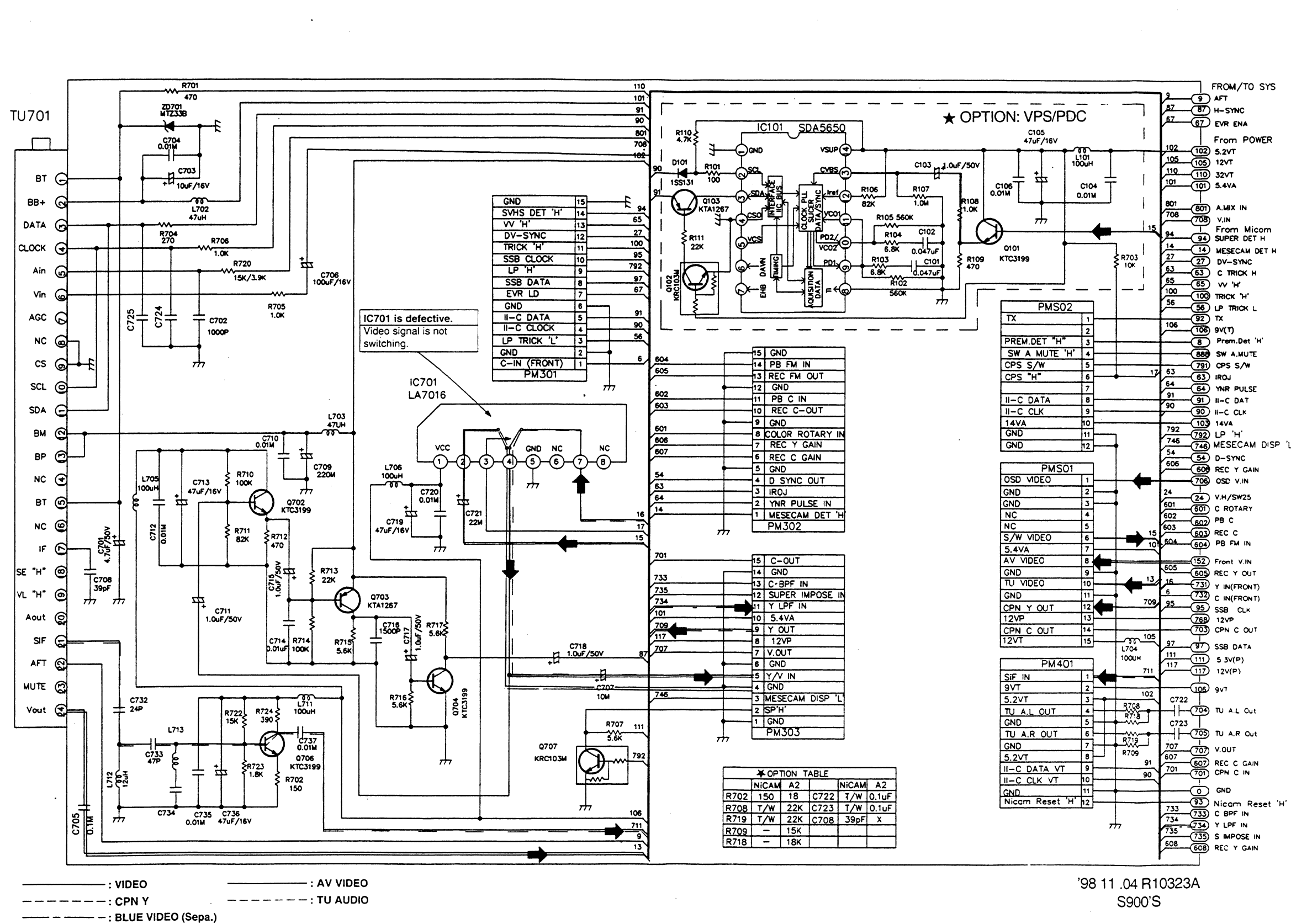
Tu701

32.7	1
4.95	
2.5	
2.5	
0	5
0	
1.6	
0	
0	
2.5	10
2.5	
5.1	
5.1	
5.1	
0	
32.7	15
0	
0	
0	
0	
2.4	20
3.6	
2.8	
0	
3.8	24

IC101 (SDA 5650)

0	1	14	5.2
2.7			1.5
2.7			1.6
0			2.5
2.6	5	10	2.6
2.6			2.5
2.6			0

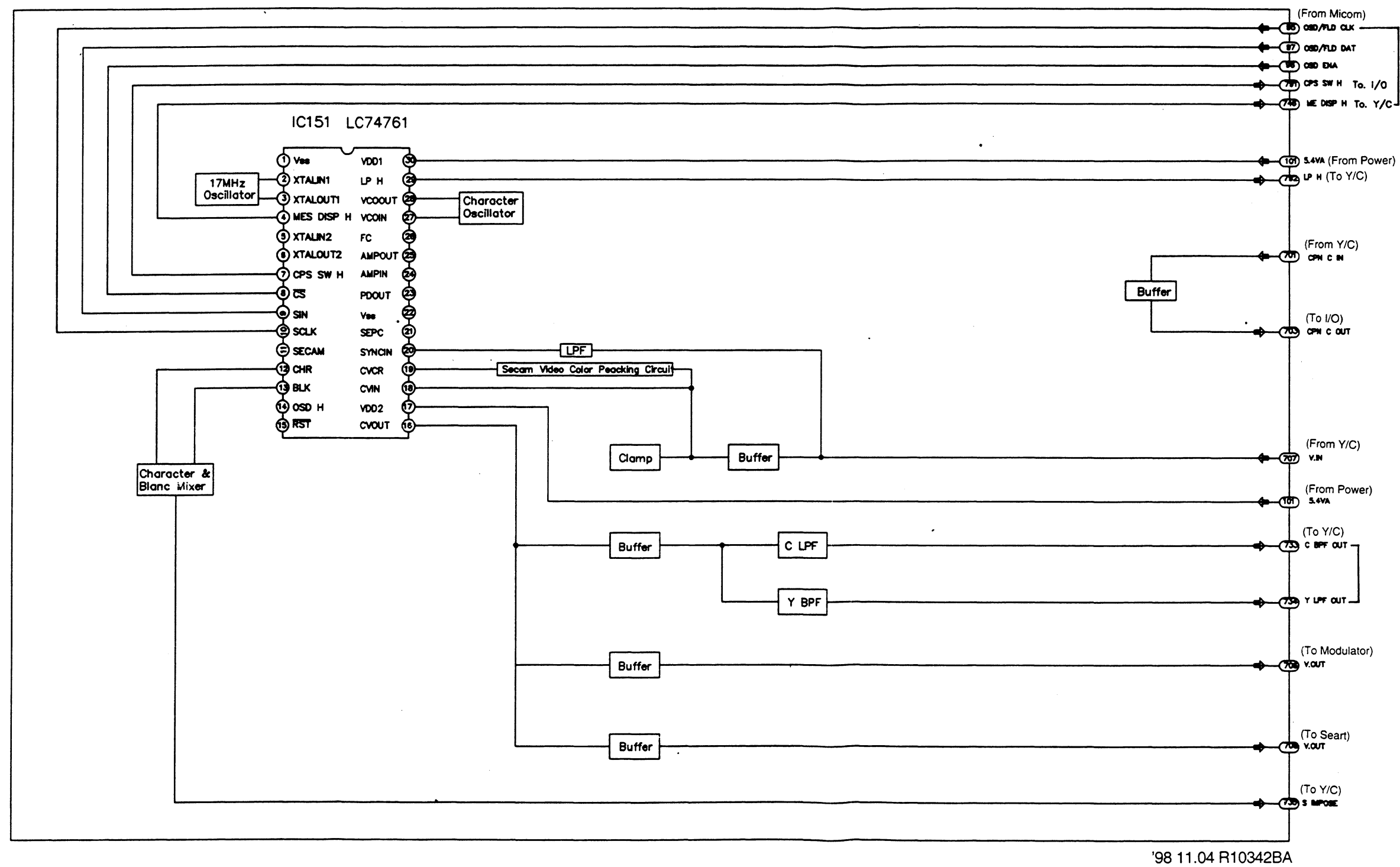
3. Tuner/IF & VPS/PDC Circuit Diagram



LOCATION GUIDE

C101	I7	R702	C2
C102	I7	R703	K7
C103	I8	R704	B7
C104	J7	R705	C6
C105	J8	R706	C7
C106	J7	R707	F3
C701	B4	R708	K3
C702	C6	R709	K3
C703	B8	R710	C5
C704	B8	R711	C4
C705	B2	R712	C4
C706	D7	R713	D4
C707	F3	R714	C3
C708	B4	R715	D3
C709	D5	R716	D3
C710	C5	R717	E4
C711	C4	R718	K3
C712	B4	R719	K3
C713	C5	R720	C7
C714	C3	R721	C3
C715	C4	R722	C2
C716	D4	R723	C2
C717	D3	R724	C3
C718	D5	TU701	A8
C719	F3	ZD701	B8

4. OSD Block Diagram



★ OSD IC Voltage Sheet

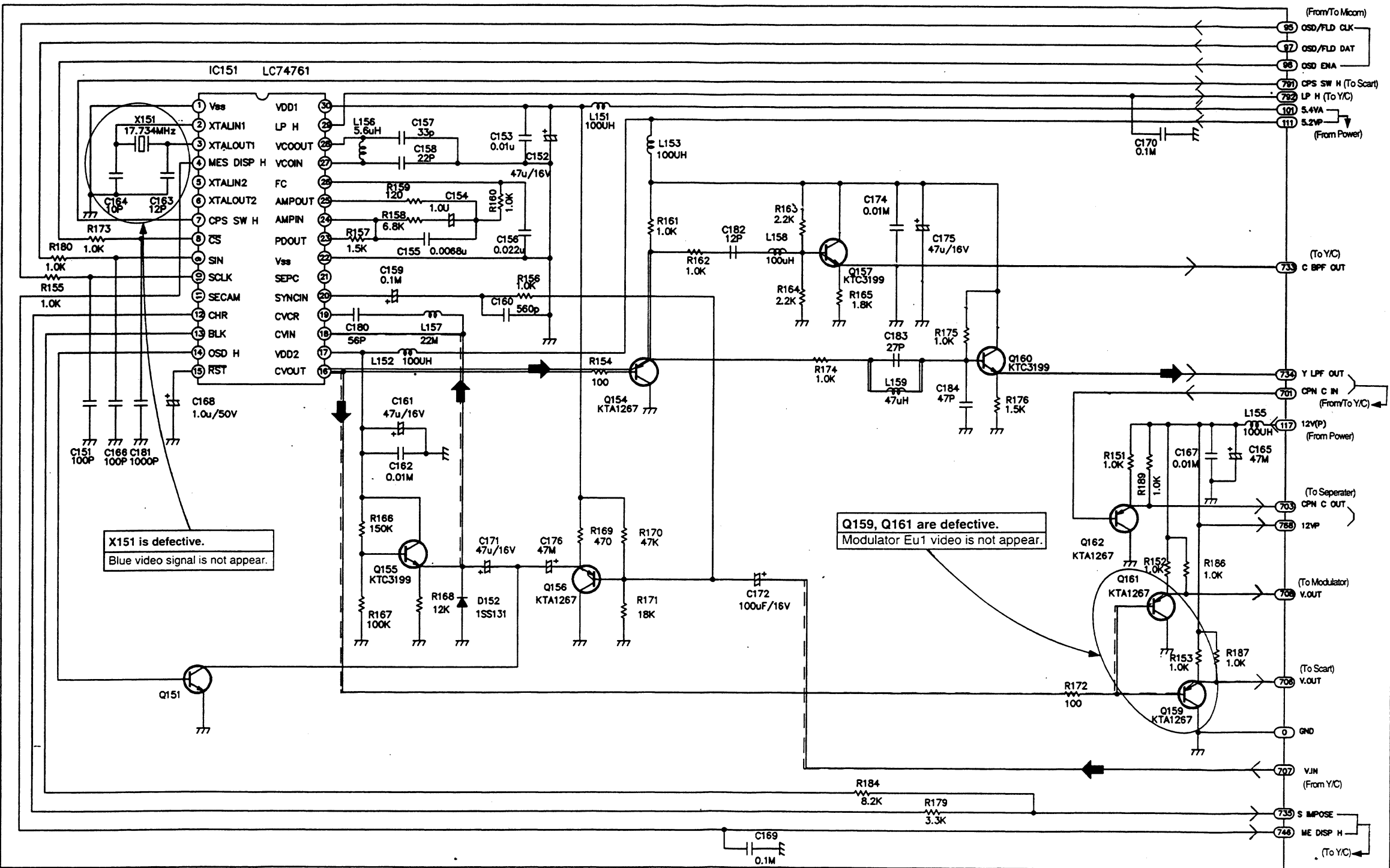
0	1	30	5.2
2.5			0
2.7			2.7
5.0			2.6
4.8	5		2.4
5.2		25	2.4
0			2.8
2.5			2.8
2.6	10		0
2.6			2.0
2.6		20	3.0
0(2.5)			0.7
0(2.5)			2.5
0			5.3
5.0	15		2.5

★ OSD TR Voltage Sheet

Port TR No.	Emitter	Base	Collector
Q154	3.0	2.3	0
Q155	2.4	2.0	5.3
Q156	2.4	1.9	0
Q157	2.0	2.7	5.3
Q159	3.0	2.5	0
Q160	3.5	4.1	5.3
Q161	3.0	2.5	0
Q162	2.8	2.1	0

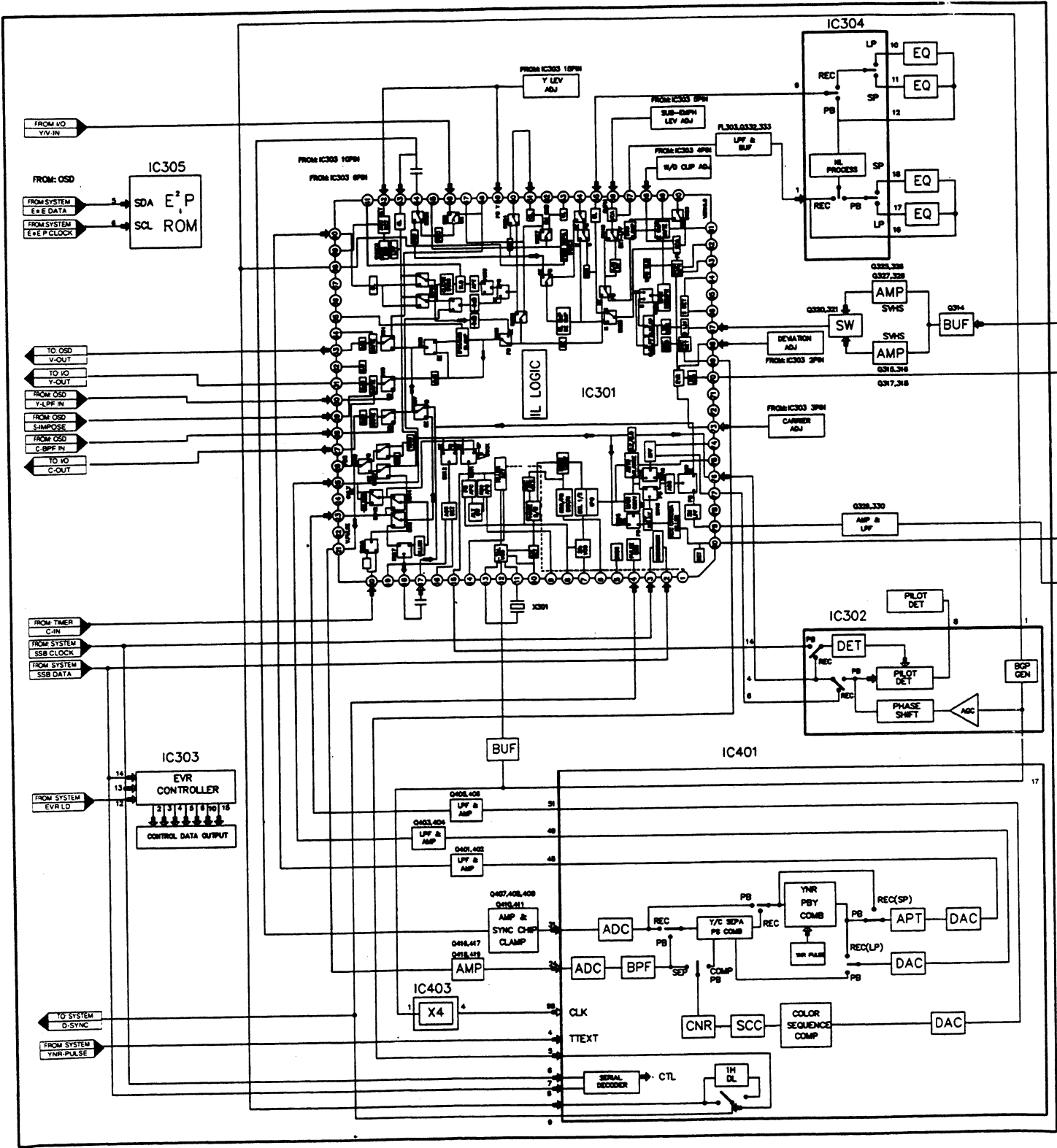
4. OSD Circuit Diagram

LOCATION GUIDE



C151	B5
C152	E7
C153	E7
C154	E7
C155	D6
C156	E7
C157	D7
C158	D7
C159	D6
C160	E6
C161	D5
C162	D5
C163	B7
C164	B7
C165	K5
C166	B5
C167	J5
C168	C5
C169	G2
C170	J7
C171	E4
C172	G4
C173	H7
C174	H7
C175	H7
C176	E4
C180	D6
C181	B5
C182	G7
C183	H6
C184	H5
D152	E4
IC151	C8
L151	F7
L152	D6
L153	F7
L155	K5
L156	D7
L157	D6
L158	G7
L159	H5
Q151	B3
Q154	F5
Q155	D4
Q156	E4
Q157	H6
Q159	J3
Q160	I6
Q161	J4
Q162	J4
R151	J5
R152	J4
R153	J3
R154	F6
R155	A6
R156	E6
R157	D7
R158	D7
R159	D7
R160	E7
R161	F7
R162	F6
R163	G7
R164	G6
R165	H6
R166	D4
R167	D4
R168	D4
R169	F4
R170	F4
R171	F4
R172	I3
R173	B7
R174	H6
R175	H6
R176	I5
R179	H2
R180	A6
R184	H2
R186	K4
R187	K3
R189	J5
X151	B7

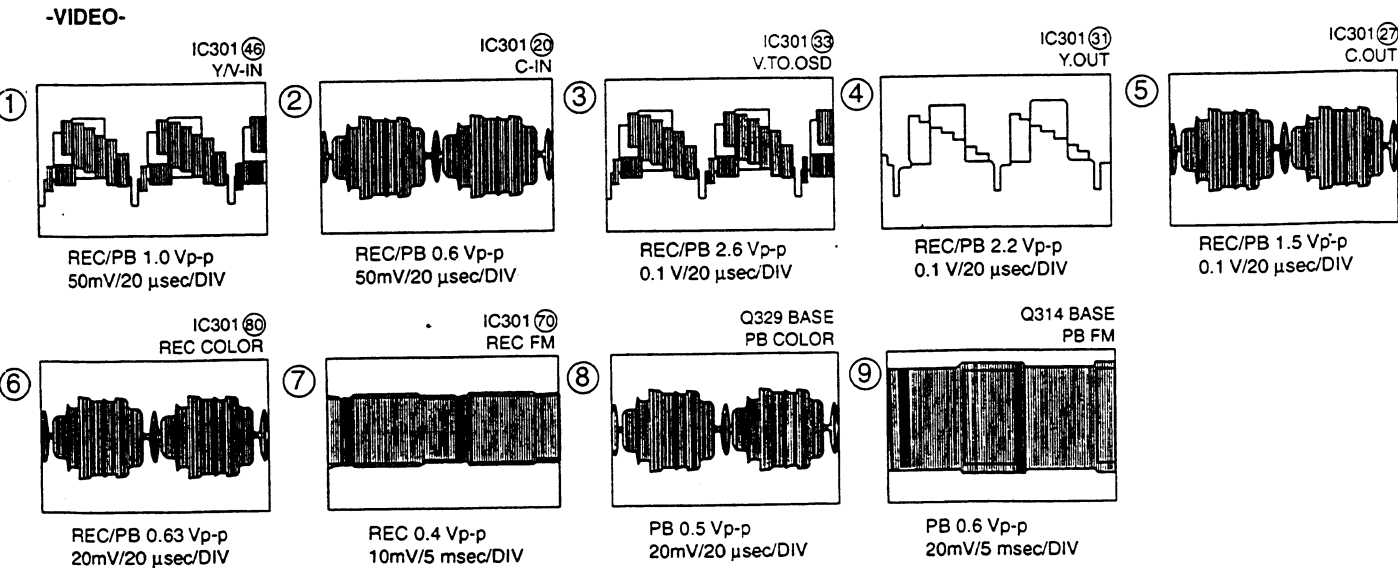
5. 6. 7, Y/C // Separator // Pre-Amp Block Diagram



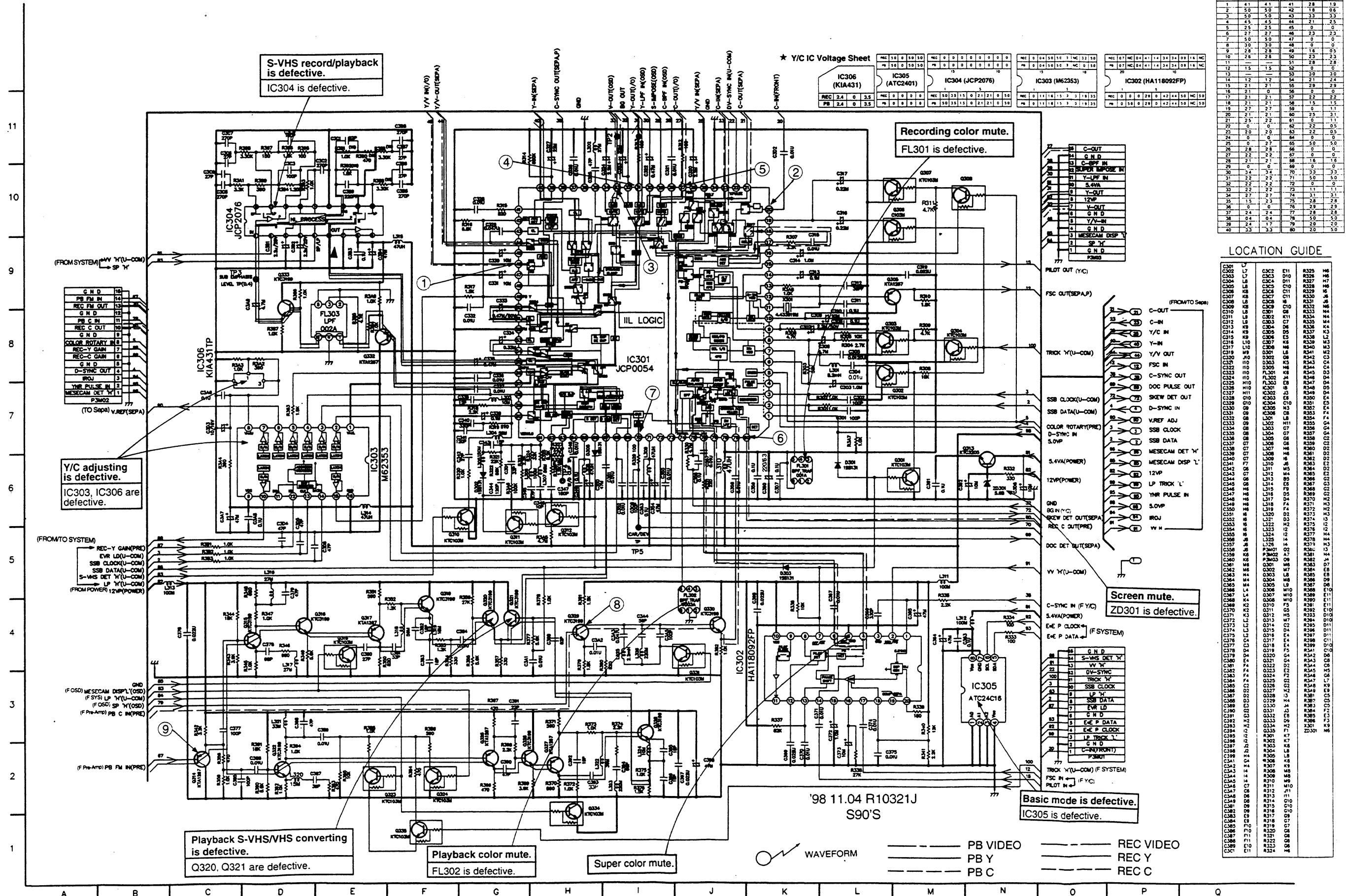
★ Y/C TR Voltage Sheet

TR NO.	Emitter		Collector		Base	
	REC	PB	REC	PB	REC	PB
Q301	0	0	0	0	3.7	3.7
Q302	0	0	0	0	0	0
Q303	0	0	0	0	4.0	4.0
Q304	0	0	4.0	4.0	0	0
Q305	2.0	2.0	0	0	1.4	1.4
Q306	0	0	0	0	0	0
Q307	0	0	0	0	3.9	3.9
Q310	0	0	0.8	0.8	0	0
Q311	0	0	0.9	0.9	0	0
Q312	0	0	0	0	4.9	4.9
Q313	4.9	4.9	5.0	5.0	5.5	5.5
Q314	1.8	1.8	0	0	1.2	1.2
Q315	1.4	1.4	10.3	10.3	2.0	2.0
Q316	9.8	9.8	11.8	11.8	10.4	10.4
Q317	10.4	10.4	2.1	2.1	9.7	9.7
Q318	0	0	1.3	1.3	0	0
Q319	9.7	9.7	11.8	11.8	10.4	10.4
Q320	4.1	4.1	11.8	11.8	2.0	2.0
Q321	4.1	4.1	11.8	11.8	4.7	4.7
Q322	2.1	2.1	9.6	9.6	2.7	2.7
Q323	0	0	0	0	3.4	3.4
Q324	0	0	0	0	0	0
Q325	10.3	10.3	1.5	1.5	9.6	9.6
Q326	9.6	9.6	11.8	11.8	10.3	10.3
Q327	10.3	10.3	1.5	1.5	9.7	9.7
Q328	9.6	9.6	11.8	11.8	10.3	10.3
Q329	1.8	1.8	2.8	2.8	2.4	2.4
Q330	2.2	2.2	4.7	4.7	2.8	2.8
Q331	0	0	0	0	5.0	5.0
Q332	2.6	2.6	0	0	2.0	2.0
Q333	2.6	2.6	4.8	4.8	3.3	3.3
Q334	0	0	0	0	3.7	3.7
Q335	0	0	0	0	0	0

★ WAVEFORMS



5.Y/C Circuit Diagram



★ Y/C IC Voltage Sheet

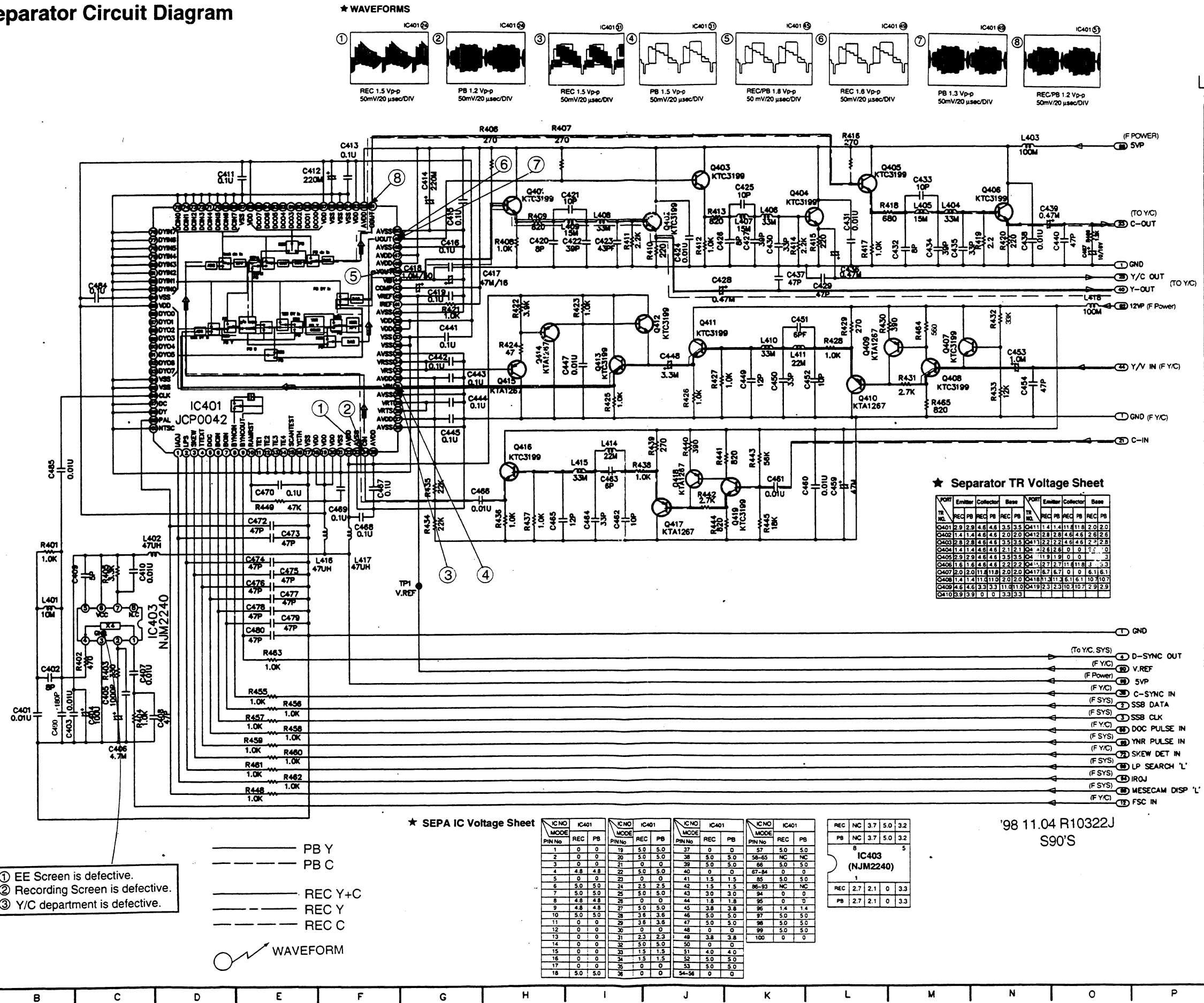
IC	MODE	REC	PB
IC306 (KIA431P)	REC	2.4	0
IC305 (ATC2401)	REC	0	0
IC304 (JCP2076)	REC	0	0
IC303 (M62353)	REC	0	0
IC302 (HA118092FP)	REC	0	0

ICNO	MODE	REC	PB
1	41	41	2.8
2	5.0	5.0	4.2
3	5.0	5.0	3.3
4	4.5	4.5	2.1
5	2.5	2.5	0
6	2.7	2.7	2.3
7	5.0	5.0	0
8	5.0	5.0	0
9	2.8	2.8	1.6
10	2.8	2.8	2.3
11	—	—	2.8
12	1.5	1.5	0
13	—	—	3.0
14	1.2	1.2	2.4
15	2.1	2.1	2.9
16	2.1	2.1	0
17	2.1	2.1	2.2
18	2.1	2.1	1.5
19	2.7	2.7	0
20	2.1	2.1	3.1
21	2.5	2.5	0
22	0	0	0.5
23	2.0	2.0	0.5
24	0	0	0
25	2.2	2.2	5.0
26	2.8	2.8	0
27	2.2	2.2	0
28	2.1	2.1	0
29	0	0	0
30	3.4	3.4	3.3
31	2.2	2.2	0
32	2.2	2.2	0
33	2.2	2.2	1.1
34	2.2	2.2	2.1
35	1.3	1.3	2.8
36	0	0	2.9
37	2.4	2.4	2.8
38	0.4	0.4	5.0
39	1.7	1.7	2.0
40	3.3	3.3	5.0

LOCATION GUIDE

ICNO	MODE	REC	PB
1	41	41	2.8
2	5.0	5.0	4.2
3	5.0	5.0	3.3
4	4.5	4.5	2.1
5	2.5	2.5	0
6	2.7	2.7	2.3
7	5.0	5.0	0
8	5.0	5.0	0
9	2.8	2.8	1.6
10	2.8	2.8	2.3
11	—	—	2.8
12	1.5	1.5	0
13	—	—	3.0
14	1.2	1.2	2.4
15	2.1	2.1	2.9
16	2.1	2.1	0
17	2.1	2.1	2.2
18	2.1	2.1	1.5
19	2.7	2.7	0
20	2.1	2.1	3.1
21	2.5	2.5	0
22	0	0	0.5
23	2.0	2.0	0.5
24	0	0	0
25	2.2	2.2	5.0
26	2.8	2.8	0
27	2.2	2.2	0
28	2.1	2.1	0
29	0	0	0
30	3.4	3.4	3.3
31	2.2	2.2	0
32	2.2	2.2	0
33	2.2	2.2	1.1
34	2.2	2.2	2.1
35	1.3	1.3	2.8
36	0	0	2.9
37	2.4	2.4	2.8
38	0.4	0.4	5.0
39	1.7	1.7	2.0
40	3.3	3.3	5.0

6. Separator Circuit Diagram



LOCATION GUIDE

C401	B4	Q404	K10
C402	B4	Q405	K10
C403	B4	Q406	N10
C404	C4	Q407	M8
C405	C4	Q408	M8
C406	C3	Q409	L8
C407	C4	Q410	L8
C408	D4	Q411	J9
C409	C6	Q412	J9
C410	C6	Q413	I8
C411	H10	Q414	H8
C412	E11	Q415	H8
C413	F11	Q416	H7
C414	G10	Q417	J6
C415	G10	Q418	J7
C416	G10	Q419	K6
C417	H9	R401	B6
C418	G9	R402	C4
C419	G9	R403	C4
C420	H10	R404	C4
C421	I10	R405	C6
C422	H10	R406	H11
C423	I10	R407	H11
C424	J9	R408	H10
C425	K10	R409	H10
C426	K10	R410	J9
C427	K10	R411	I10
C428	J9	R412	J10
C429	L9	R413	J10
C430	K10	R414	K9
C431	L10	R415	L10
C432	M9	R416	L11
C433	M10	R417	L9
C434	M9	R418	L10
C435	M9	R419	N10
C436	L9	R420	N10
C437	K9	R421	G9
C438	N10	R422	H9
C439	N10	R423	I9
C440	O10	R424	H8
C441	G9	R425	I8
C442	G8	R426	J8
C443	G8	R427	J8
C444	G8	R428	L8
C445	G7	R429	L9
C447	I8	R430	M9
C448	J8	R431	M8
C449	K8	R432	N9
C450	K8	R433	N8
C451	K9	R434	G6
C452	L8	R435	G7
C453	N8	R436	H6
C454	N8	R437	H6
C459	L7	R438	I7
C460	L7	R439	J7
C461	K7	R440	J7
C462	I6	R441	J7
C463	I7	R442	J7
C464	I6	R443	K7
C465	H6	R444	J6
C466	G7	R445	K6
C467	F7	R446	E3
C468	F6	R447	E5
C469	F6	R448	E5
C470	E7	R449	E4
C472	E6	R450	E4
C473	E6	R451	E4
C474	E6	R452	E4
C475	E6	R453	E3
C476	E5	R454	E3
C477	E5	R455	E3
C478	E5	R456	E3
C479	E5	R457	E3
C480	E5	R458	M8
C484	C9	R459	O10
C485	B7	TP1	G5
C487	O9		
C490	B4		
IC401	D8		
IC403	D5		
L401	B5		
L402	C6		
L403	C6		
L404	M10		
L405	M10		
L406	K10		
L407	K10		
L408	I10		
L409	I10		
L410	K8		
L411	K8		
L414	I7		
L415	I7		
L416	F6		
L417	F6		
L418	O9		
Q401	H10		
Q402	J10		
Q403	J11		

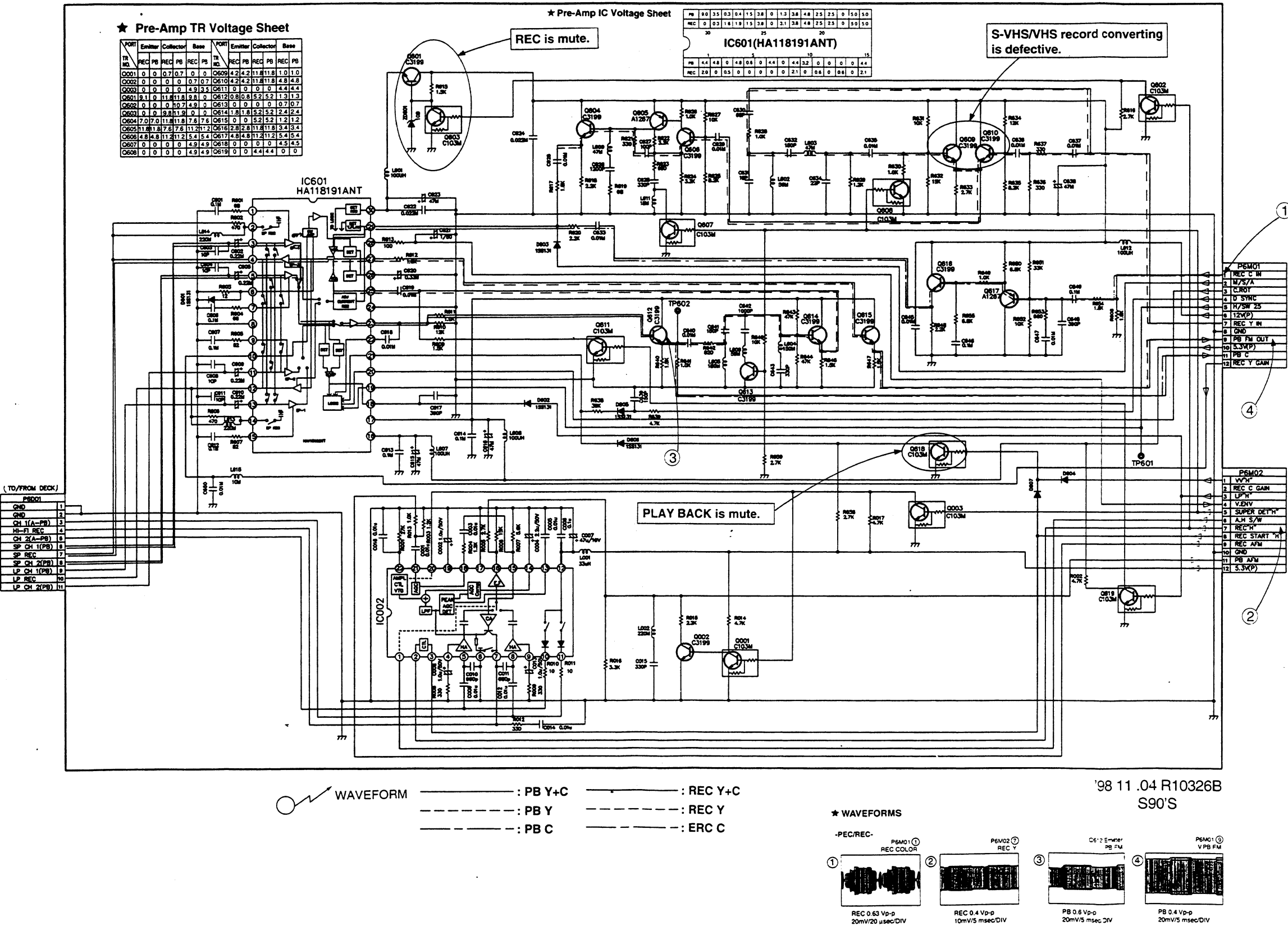
★ SEPA IC Voltage Sheet

IC#NO			IC#NO			IC#NO			IC#NO		
MODE			MODE			MODE			MODE		
PIN NO	REC	PB	PIN NO	REC	PB	PIN NO	REC	PB	PIN NO	REC	PB
1	0	0	19	5.0	5.0	37	0	0	57	5.0	5.0
2	0	0	20	5.0	5.0	38	5.0	5.0	58-65	NC	NC
3	0	0	21	0	0	39	5.0	5.0	66	5.0	5.0
4	4.8	4.8	22	5.0	5.0	40	0	0	67-84	0	0
5	0	0	23	0	0	41	1.5	1.5	85	5.0	5.0
6	5.0	5.0	24	2.5	2.5	42	1.5	1.5	86-93	NC	NC
7	5.0	5.0	25	0	0	43	5.0	5.0	94	0	0
8	4.8	4.8	26	0	0	44	1.8	1.8	95	0	0
9	4.8	4.8	27	5.0	5.0	45	3.8	3.8	96	1.4	1.4
10	5.0	5.0	28	3.8	3.8	46	5.0	5.0	97	5.0	5.0
11	0	0	29	3.8	3.8	47	5.0	5.0	98	5.0	5.0
12	0	0	30	0	0	48	0	0	99	5.0	5.0
13	0	0	31	2.3	2.3	49	3.8	3.8	100	0	0
14	0	0	32	5.0	5.0	50	0	0			
15	0	0	33	1.5	1.5	51	4.0	4.0			
16	0	0	34	1.5	1.5	52	5.0	5.0			
17	0	0	35	0	0	53	5.0	5.0			
18	5.0	5.0	36	0	0	54-56	0	0			

REC	NC	3.7	5.0	3
PB	NC	3.7	5.0	3
8 IC403 (NJM2240) 1				
REC	2.7	2.1	0	3
PB	2.7	2.1	0	3

'98 11.04 R10322J
S90'S

7. Pre-Amp Circuit Diagram

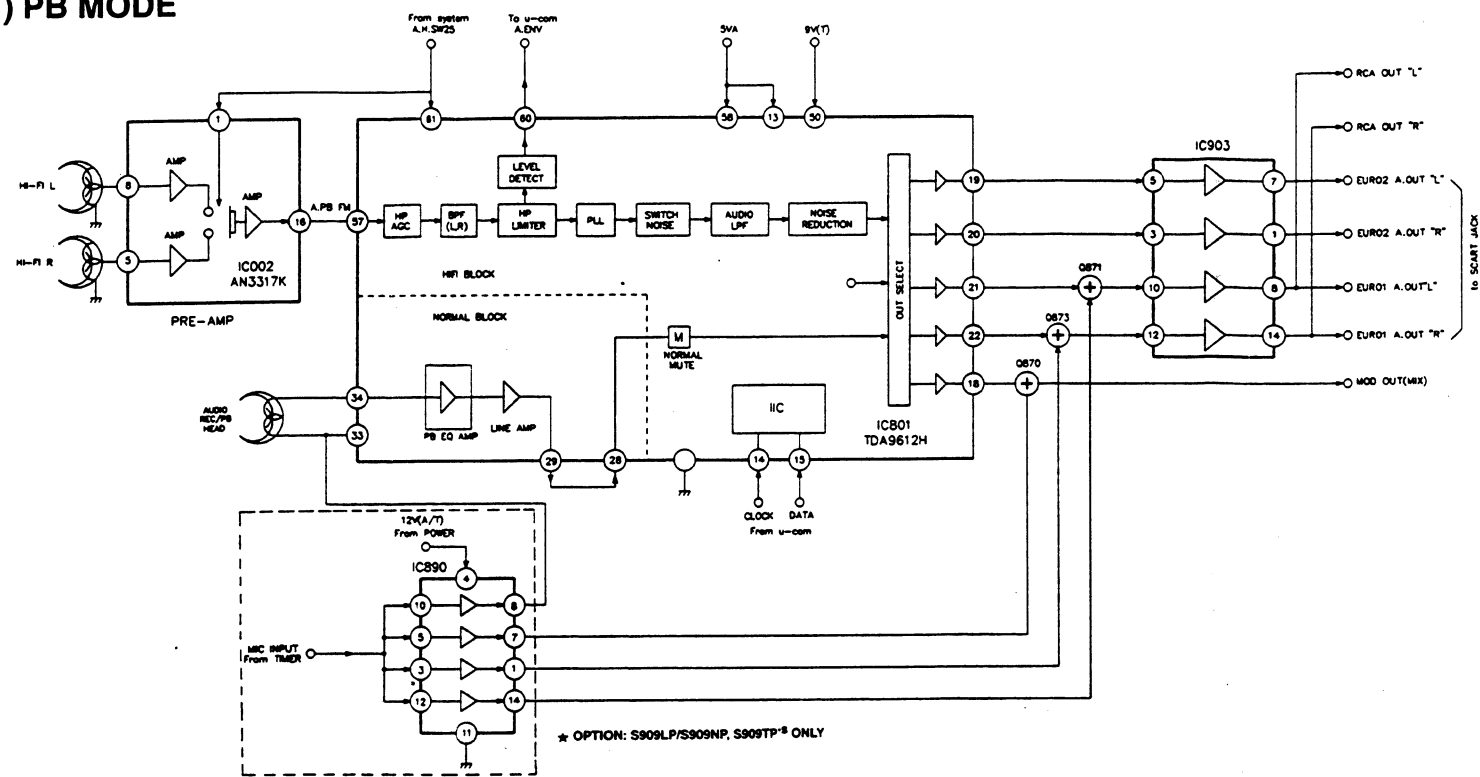


LOCATION GUIDE

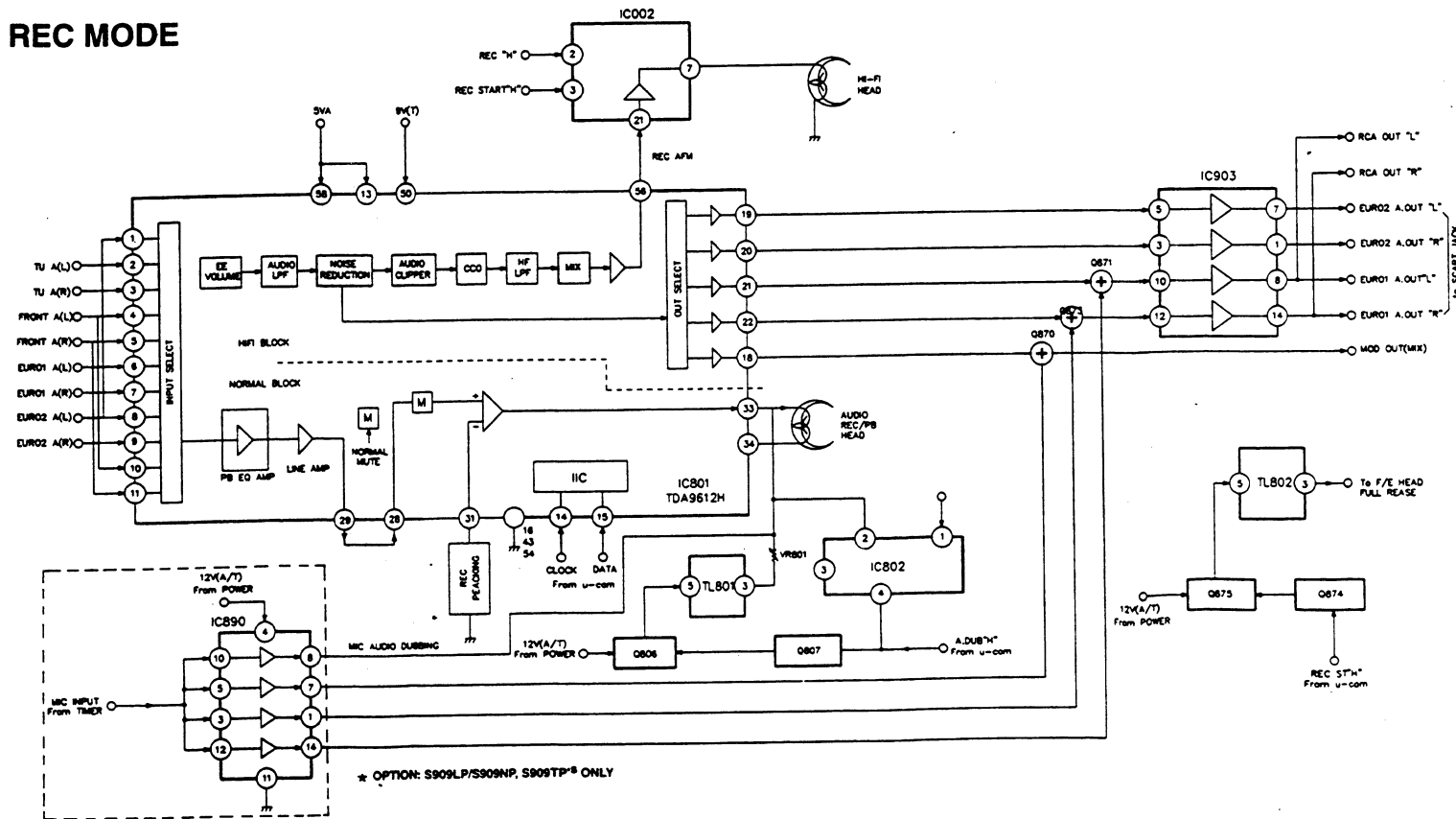
Q001	F5	Q602	Q11
Q002	G5	Q603	Q10
Q003	G5	Q604	H10
Q004	H5	Q605	I10
Q005	H5	Q606	J10
Q006	H5	Q607	J9
Q007	H5	Q608	L9
Q008	F3	Q609	M10
Q009	G3	Q610	M10
Q010	G3	Q611	H8
Q011	G3	Q612	I8
Q012	G3	Q613	J7
Q013	H4	Q614	K8
Q014	H3	Q615	L8
Q015	I4	Q616	M9
Q016	F5	Q617	M8
Q601	D9	Q618	L6
Q602	D9	Q619	O4
Q603	D9	R001	F5
Q604	D9	R002	N5
Q605	D8	R003	F5
Q606	D8	R004	G5
Q607	D8	R005	G5
Q608	D7	R006	G5
Q609	D7	R007	G5
Q610	D7	R008	F3
Q611	D7	R009	N3
Q612	D6	R010	H4
Q613	F6	R011	H4
Q614	G6	R012	G3
Q615	F6	R013	F5
Q616	G6	R014	J4
Q617	F7	R015	J4
Q618	F8	R016	I4
Q619	F8	R017	L5
C620	F8	R601	D9
C621	G9	R602	D9
C622	F9	R603	D8
C623	F9	R604	D8
C624	G10	R605	D8
C625	H10	R606	D7
C626	H10	R607	D6
C627	I10	R608	O8
C628	I10	R609	F8
C629	J10	R610	F8
C630	J10	R611	O8
C631	J10	R612	F9
C632	K10	R613	F9
C633	H9	R615	F11
C634	K10	R616	O10
C635	L10	R617	H9
C636	N10	R618	H10
C637	N10	R619	H9
C638	N10	R620	H9
C639	I7	R621	I10
C640	J8	R622	I10
C641	J8	R623	I10
C642	J8	R624	J10
C643	K7	R625	J10
C644	L8	R626	J10
C645	M8	R627	J10
C646	N8	R628	J10
C647	N8	R629	L10
C648	N8	R630	L10
C649	N8	R631	L10
C650	D6	R632	M10
D601	C8	R633	M9
D602	H7	R634	N10
D603	H9	R635	N10
D604	N6	R636	N10
D605	I7	R637	N10
D606	I6	R638	H7
D607	N6	R639	I7
IC002	F4	R640	I7
IC601	E10	R641	I7
L001	H5	R642	J7
L002	I4	R643	K8
L601	F10	R644	K7
L602	K10	R645	K7
L603	K10	R646	J8
L604	K8	R647	L7
L605	J7	R648	M8
L606	J7	R649	M8
L607	F6	R650	N9
L608	G6	R651	N9
L609	H10	R652	N8
L610	I9	R653	N8
L611	I9	R654	O8
L612	O9	R655	O8
L613	D7	R656	L5
L614	D9	R657	L5
L615	D6	R658	L5
P6M01	A6	R659	K6
P6M01	P8	TP601	O6
P6M02	P6	TP602	I8
Q001	J4	ZD601	F10
Q002	J4		
Q003	M5		
Q601	F11		

8. Hi-Fi Block Diagram

1) PB MODE



2) REC MODE

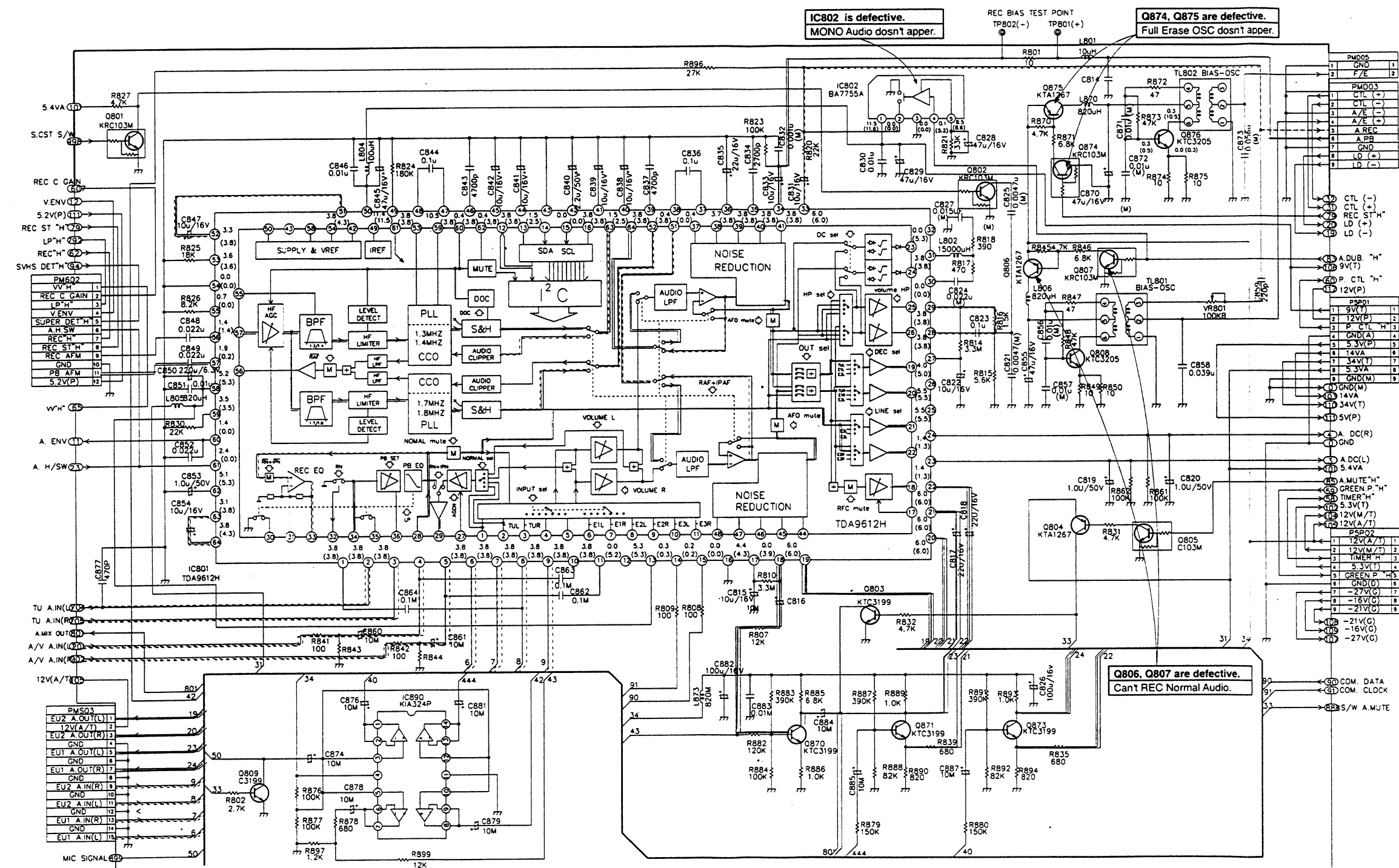


★ Hi-Fi TR Voltage Sheet

Port	Emitter (REC)	Base (REC)	Collector (REC)
TR No.			
Q801	0.0(0.0)	4.2(4.2)	0.0(0.0)
Q802	0.0(0.0)	0.0(0.0)	0.0(0.0)
Q803	0.0(0.0)	0.7(0.7)	0.0(0.0)
Q804	5.1(5.1)	4.4(4.4)	5.1(5.1)
Q805	0.0(0.0)	5.0(5.0)	0.0(0.0)
Q806	12.0(12.0)	12.0(11.2)	0.0(12.0)
Q807	0.0(0)	0.0(5.0)	12.0(0)
Q808	0.0(0.2)	0.0(0.2)	0.0(10.8)
Q809	0.0(0.0)	0.7(0.7)	0.0(0.0)
Q870	0.9(0.9)	1.4(1.4)	6.0(6.0)
Q871	1.3(1.3)	1.9(1.9)	10.2(10.2)
Q873	1.3(1.3)	10.2(10.2)	10.2(10.2)
Q874	0.0(0.0)	0.0(5.0)	12.0(0.0)
Q875	12.0(12.0)	12.0(11.2)	0(12.0)
Q876	0.0(0.2)	0.0(0.2)	0.0(10.8)

'98 11 .04 R10320BC

8. Hi-Fi Circuit Diagram

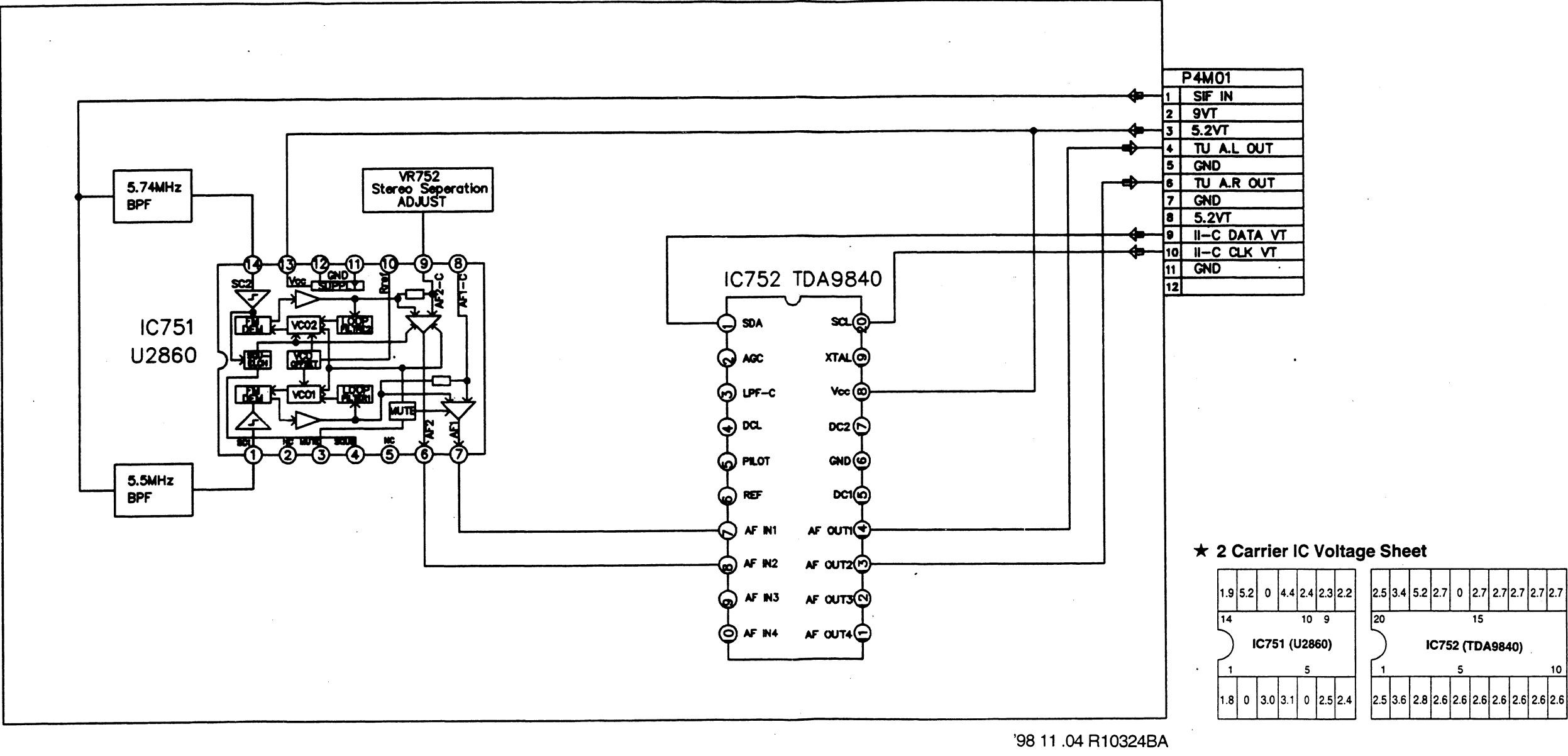


LOCATION GUIDE

998	A10	O803	K5
C814	M11	O804	M6
C815	I5	O805	N6
C816	J5	O806	L9
C817	L5	O807	M9
C818	L6	O808	M8
C819	M6	O809	C3
C820	N6	O810	J3
C821	L8	O811	K3
C822	L7	O812	M3
C823	L8	O813	M10
C824	L9	O814	M11
C825	L10	O815	N10
C826	M4	O816	M11
C827	L10	O817	C3
C828	L10	O818	I5
C829	K10	O819	I5
C830	K10	O820	H5
C831	J10	O821	J5
C832	J10	O822	L8
C833	J10	O823	L8
C834	I10	O824	L8
C835	I10	O825	L9
C836	I10	O826	L9
C837	H10	O827	J10
C838	H10	O828	L10
C839	H10	O829	C7
C840	G10	O830	E10
C841	G10	O831	C9
C842	F10	O832	C9
C843	F10	O833	B11
C844	F10	O834	C7
C845	E10	O835	N6
C846	E10	O836	K5
C847	C9	O837	M3
C848	C8	O838	L3
C849	C8	O839	M8
C850	B8	O840	D4
C851	C8	O841	E4
C852	C7	O842	E4
C853	C6	O843	M9
C854	C6	O844	M9
C855	M8	O845	M8
C856	M8	O846	M8
C857	M7	O847	M7
C858	O8	O848	N7
C859	O8	O849	N6
C860	E5	O850	N6
C861	F5	O851	N6
C862	C5	O852	M11
C863	C5	O853	M10
C864	E5	O854	N11
C865	M10	O855	N10
C866	N10	O856	O10
C867	N10	O857	D3
C868	O10	O858	D3
C869	D3	O859	O2
C870	E4	O860	E2
C871	E4	O861	K2
C872	B5	O862	L2
C873	E3	O863	L3
C874	F2	O864	J4
C875	F4	O865	J4
C876	I4	O866	K4
C877	J4	O867	K4
C878	K3	O868	K4
C879	L3	O869	K4
C880	C5	O870	K3
C881	J11	O871	L4
C882	E4	O872	L3
C883	L9	O873	L4
C884	E10	O874	M3
C885	E10	O875	M3
C886	C7	O876	I11
C887	C7	O877	I11
C888	M9	O878	E2
C889	M11	O879	E2
C890	I4	O880	N9
C891	I4	O881	N11
C892	I4	O882	N11
C893	I4	O883	N11
C894	I4	O884	N11
C895	I4	O885	N11
C896	I4	O886	N11
C897	I4	O887	N11
C898	I4	O888	N11
C899	I4	O889	N11
C900	I4	O890	N11
C901	I4	O891	N11
C902	I4	O892	N11
C903	I4	O893	N11
C904	I4	O894	N11
C905	I4	O895	N11
C906	I4	O896	N11
C907	I4	O897	N11
C908	I4	O898	N11
C909	I4	O899	N11
C910	I4	O900	N11
C911	I4	O901	N11
C912	I4	O902	N11
C913	I4	O903	N11
C914	I4	O904	N11
C915	I4	O905	N11
C916	I4	O906	N11
C917	I4	O907	N11
C918	I4	O908	N11
C919	I4	O909	N11
C920	I4	O910	N11
C921	I4	O911	N11
C922	I4	O912	N11
C923	I4	O913	N11
C924	I4	O914	N11
C925	I4	O915	N11
C926	I4	O916	N11
C927	I4	O917	N11
C928	I4	O918	N11
C929	I4	O919	N11
C930	I4	O920	N11
C931	I4	O921	N11
C932	I4	O922	N11
C933	I4	O923	N11
C934	I4	O924	N11
C935	I4	O925	N11
C936	I4	O926	N11
C937	I4	O927	N11
C938	I4	O928	N11
C939	I4	O929	N11
C940	I4	O930	N11
C941	I4	O931	N11
C942	I4	O932	N11
C943	I4	O933	N11
C944	I4	O934	N11
C945	I4	O935	N11
C946	I4	O936	N11
C947	I4	O937	N11
C948	I4	O938	N11
C949	I4	O939	N11
C950	I4	O940	N11
C951	I4	O941	N11
C952	I4	O942	N11
C953	I4	O943	N11
C954	I4	O944	N11
C955	I4	O945	N11
C956	I4	O946	N11
C957	I4	O947	N11
C958	I4	O948	N11
C959	I4	O949	N11
C960	I4	O950	N11
C961	I4	O951	N11
C962	I4	O952	N11
C963	I4	O953	N11
C964	I4	O954	N11
C965	I4	O955	N11
C966	I4	O956	N11
C967	I4	O957	N11
C968	I4	O958	N11
C969	I4	O959	N11
C970	I4	O960	N11
C971	I4	O961	N11
C972	I4	O962	N11
C973	I4	O963	N11
C974	I4	O964	N11
C975	I4	O965	N11
C976	I4	O966	N11
C977	I4	O967	N11
C978	I4	O968	N11
C979	I4	O969	N11
C980	I4	O970	N11
C981	I4	O971	N11
C982	I4	O972	N11
C983	I4	O973	N11
C984	I4	O974	N11
C985	I4	O975	N11
C986	I4	O976	N11
C987	I4	O977	N11
C988	I4	O978	N11
C989	I4	O979	N11
C990	I4	O980	N11
C991	I4	O981	N11
C992	I4	O982	N11
C993	I4	O983	N11
C994	I4	O984	N11
C995	I4	O985	N11
C996	I4	O986	N11
C997	I4	O987	N11
C998	I4	O988	N11
C999	I4	O989	N11
C1000	I4	O990	N11

————— Hi-Fi PB ————— Normal PB
 - - - - - Hi-Fi REC - - - - - Normal REC

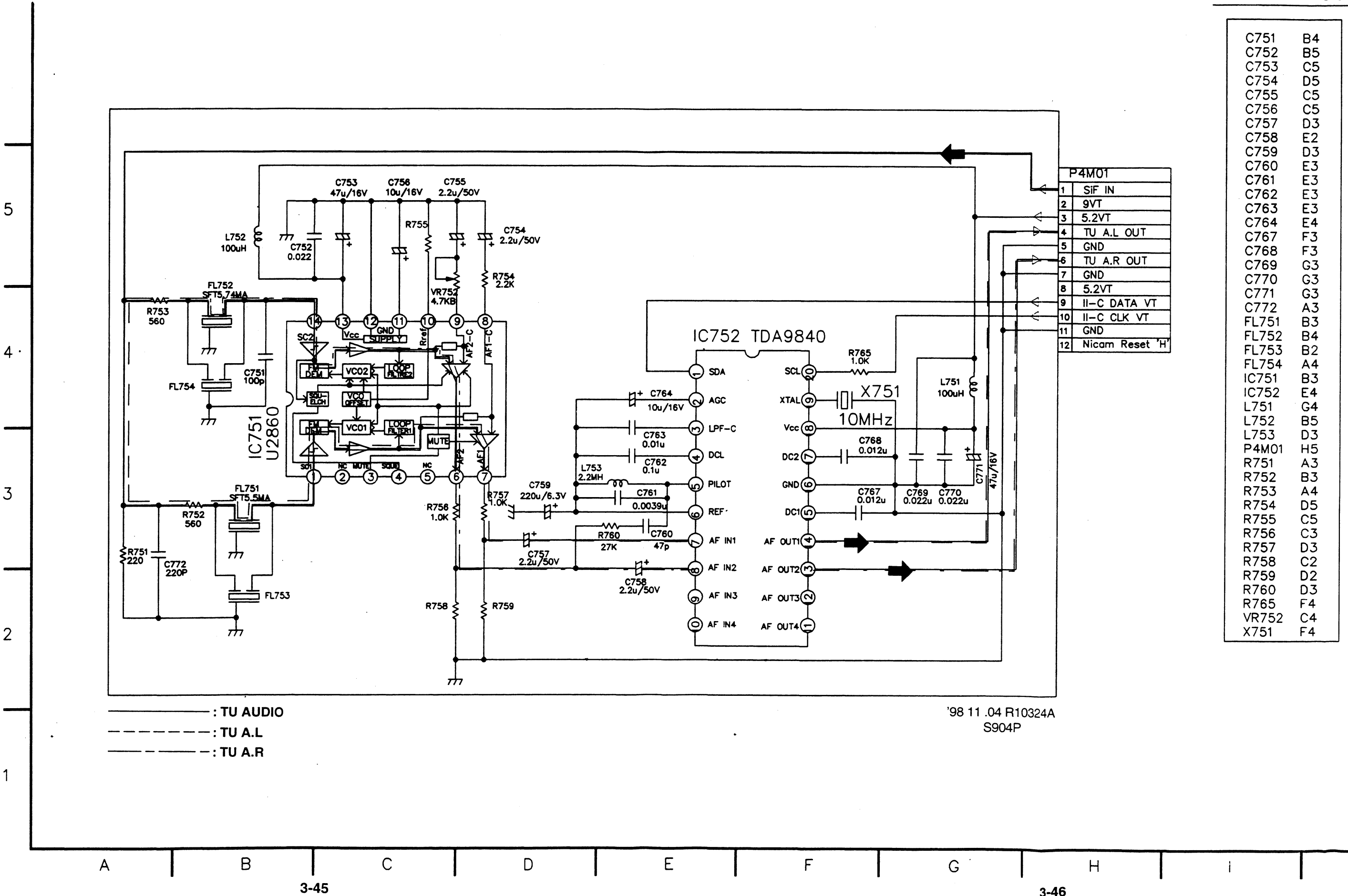
9. 2 Carrier Block Diagram



'98 11 .04 R10324BA

9. 2 Carrier Circuit Diagram

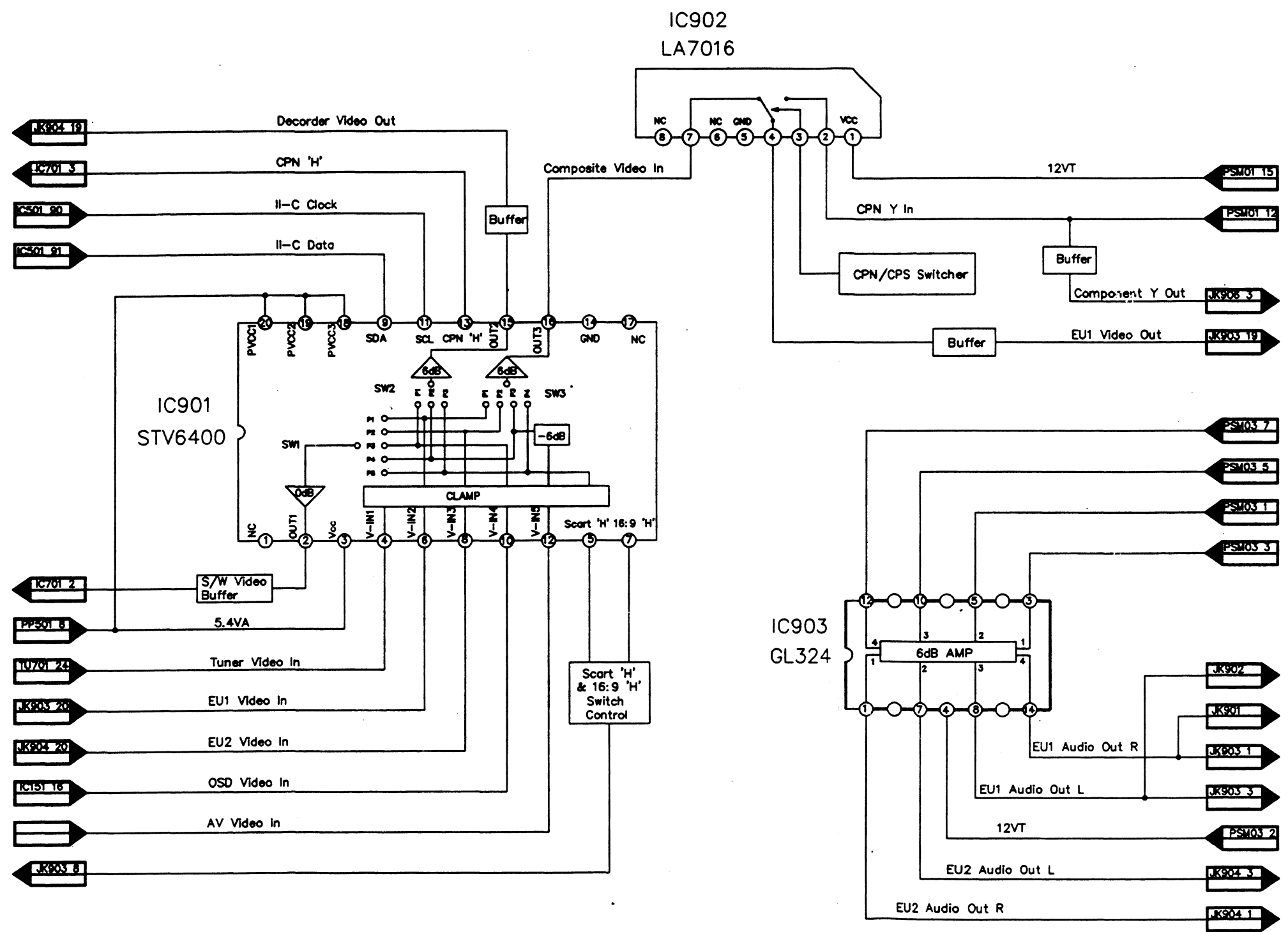
LOCATION GUIDE



— : TU AUDIO
- - - : TU A.L
- - - : TU A.R

'98 11 .04 R10324A
S904P

10. Premiere & Scart Block Diagram



★ Premiere & Scart IC Voltage Sheet

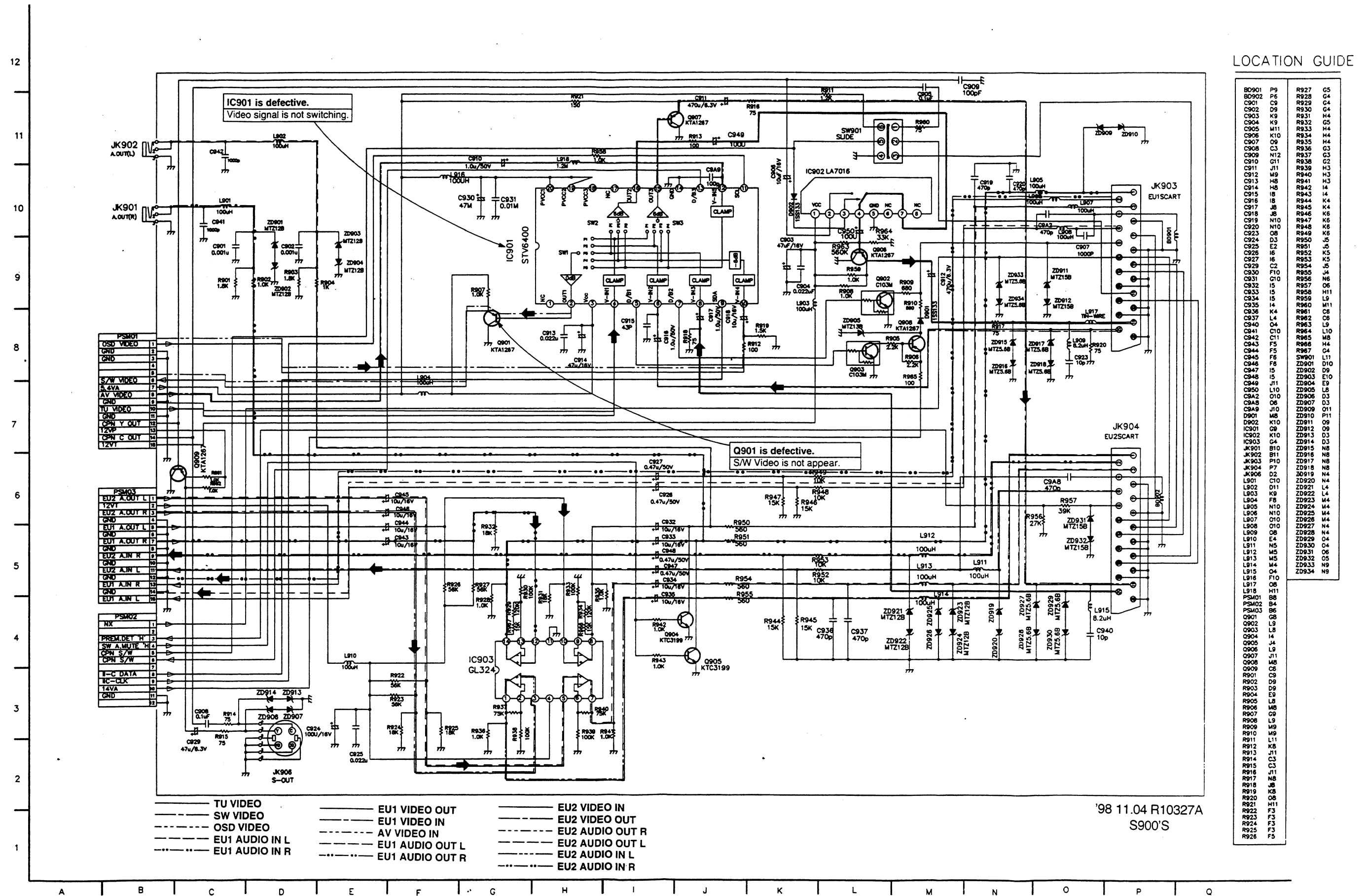
IC901 (STV6400)				IC903 (KA324)			
0	1	20	5.08	5.76	1	6.83	
1.17			5.08	2.9		2.88	
4.99			5.08	2.9		2.8	
1.81			1.62	11.84		0	
2.52	5		1.62	2.89	5	2.9	
1.42		15	0	2.9		2.9	
0.022			5.03	5.78	10	6.85	
1.42			1.42				
4.3	10		4.66				
2.2							

★ Premiere & Scart TR Voltage Sheet

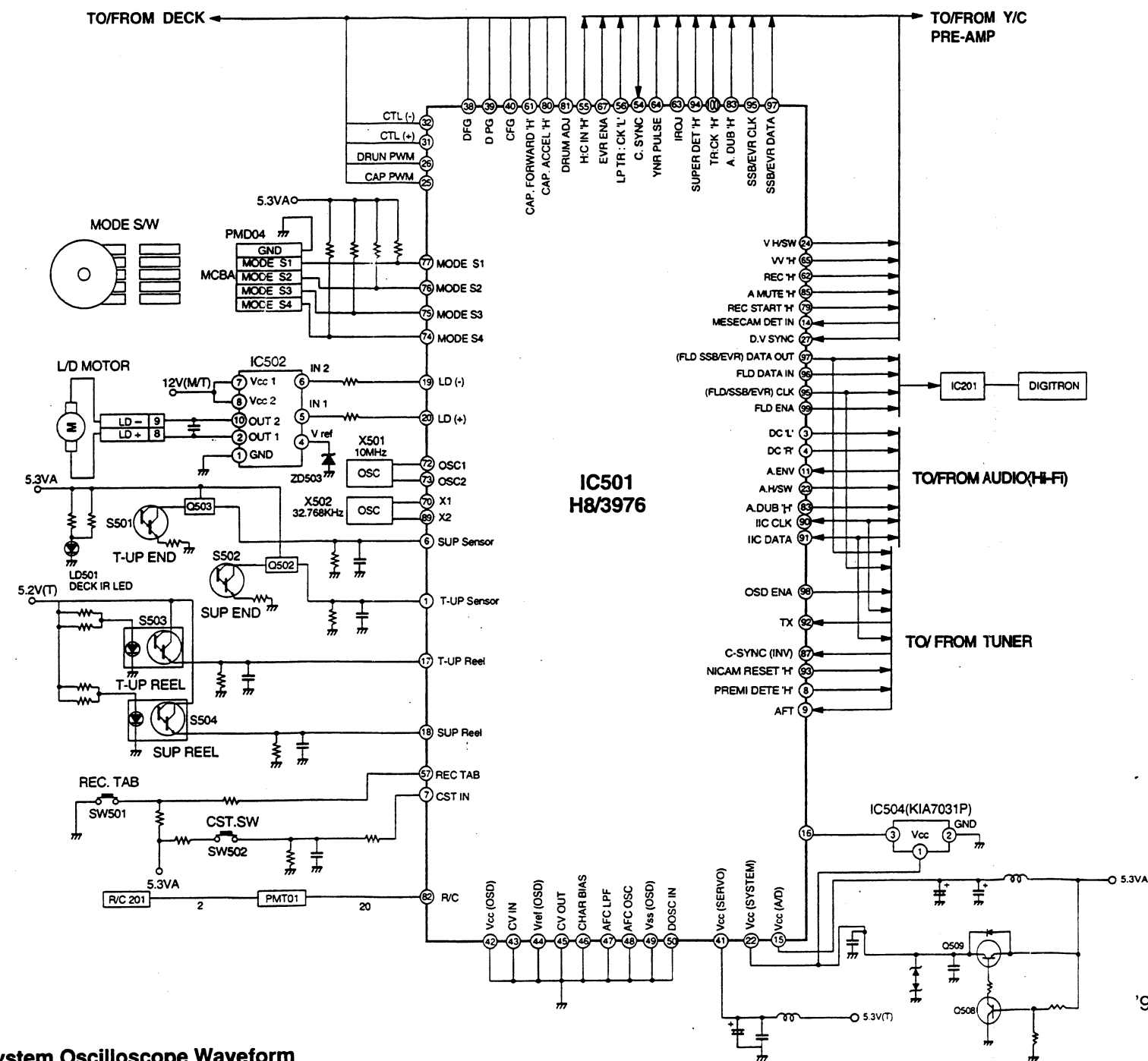
Port	Emitter	Base	Collector
TR No.			
Q901	1.3	1.2	0
Q902	0	0	11.8
Q903	0	2.6	0
Q904	0	0	0.2
Q905	0	0	0.2
Q906	3.6	3.0	0
Q907	2.2	1.6	0
Q908	11.8	11.0	11.7
Q909	2.6	2.0	0

'98 11 .04 R10327BA
S900'S

10. Premiere & Scart Circuit Diagram



11. System Block Diagram



★ IC Voltage Sheet

REC (PB)		
0.0(0.0)	1	10 0.5(0.5)
0.5(0.5)	IC502 (KA3082)	
0.7(0.7)		
4.4(2.3)		
1.8(1.8)	5	1.8(1.8)

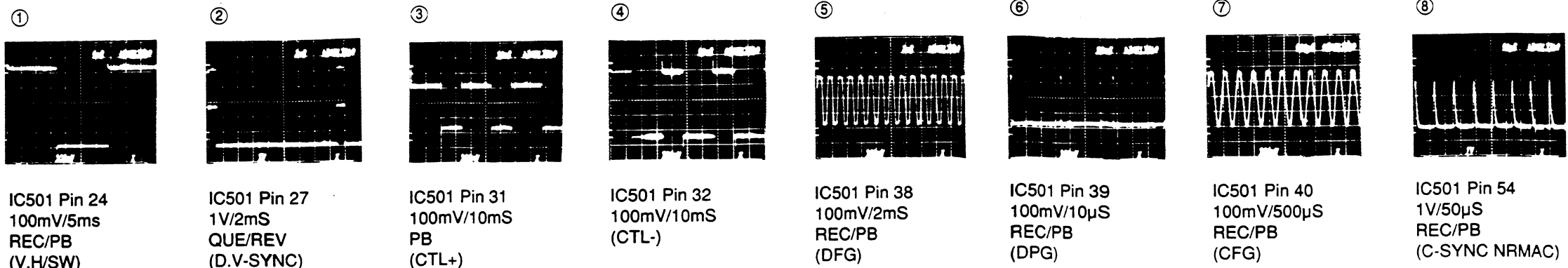
REC (PB)		
IC505 (KIA7042P)		
1	3	
5.3 (5.3)	0.0 (0.0)	4.9 (4.9)

REC (PB)		
IC504 (KIA7031P)		
1	3	
5.2 (5.23)	0.0 (0.0)	5.1 (5.1)

● IC501

IC NO			IC501			IC NO			IC501		
MODE	PIN NO	REC	PB	MODE	PIN NO	REC	PB	MODE	PIN NO	REC	PB
	1	0.4	0.4		51	0.0	0.0		51	0.0	0.0
	2	0.0	0.0		52	0.0	0.0		52	0.0	0.0
	3	3.0	3.0		53	0.0	0.0		53	0.0	0.0
	4	2.8	3.0		54	0.0	0.4		54	0.0	0.4
	5	5.1	5.1		55	0.0	0.0		55	0.0	0.0
	6	0.5	0.6		56	0.0	0.0		56	0.0	0.0
	7	1.1	1.4		57	5.0	3.4		57	5.0	3.4
	8	0.0	0.0		58	2.1	5.2		58	2.1	5.2
	9	3.1	3.3		59	0.0	0.5		59	0.0	0.5
	10	3.3	3.3		60	0.0	5.1		60	0.0	5.1
	11	1.8	1.4		61	0.0	5.2		61	0.0	5.2
	12	2.3	3.5		62	5.2	0.0		62	5.2	0.0
	13	5.2	5.2		63	0.0	0.0		63	0.0	0.0
	14	0.0	0.0		64	pulse	pulse		64	pulse	pulse
	15	5.3	5.3		65	2.2	5.2		65	2.2	5.2
	16	5.1	5.1		66	4.2	4.2		66	4.2	4.2
	17	→	pulse		67	pulse	pulse		67	pulse	pulse
	18	→	pulse		68	0.0	0.0		68	0.0	0.0
	19	2.7	5.2		69	1.5	1.5		69	1.5	1.5
	20	5.2	5.2		70	0.9	0.9		70	0.9	0.9
	21	0.0	0.0		71	0.0	0.0		71	0.0	0.0
	22	5.2	5.2		72	2.5	2.5		72	2.5	2.5
	23	→	pulse		73	2.3	2.5		73	2.3	2.5
	24	→	pulse		74	1.6	4.9		74	1.6	4.9
	25	→	pulse		75	1.7	0.0		75	1.7	0.0
	26	→	pulse		76	1.7	4.9		76	1.7	4.9
	27	→	pulse		77	1.9	4.9		77	1.9	4.9
	28	0.0	0.0		78	3.1	3.1		78	3.1	3.1
	29	0.0	0.0		79	5.2	0.0		79	5.2	0.0
	30	0.0	0.0		80	2.7	2.7		80	2.7	2.7
	31	2.8	2.8		81	1.2	1.3		81	1.2	1.3
	32	2.3	2.3		82	→	pulse		82	→	pulse
	33	0.0	0.0		83	0.0	0.0		83	0.0	0.0
	34	2.7	3.5		84	0.0	0.0		84	0.0	0.0
	35	2.3	2.4		85	0.0	0.0		85	0.0	0.0
	36	2.3	2.3		86	→	pulse		86	→	pulse
	37	2.3	2.3		87	→	pulse		87	→	pulse
	38	→	pulse		88	5.1	5.1		88	5.1	5.1
	39	→	pulse		89	2.5	3.0		89	2.5	3.0
	40	→	pulse		90	→	pulse		90	→	pulse
	41	0.0	0.0		91	→	pulse		91	→	pulse
	42	0.0	0.0		92	→	pulse		92	→	pulse
	43	0.0	0.0		93	→	5.1		93	→	5.1
	44	0.0	0.0		94	0.0	0.0		94	0.0	0.0
	45	0.0	0.0		95	→	pulse		95	→	pulse
	46	0.0	0.0		96	→	pulse		96	→	pulse
	47	0.0	0.0		97	→	pulse		97	→	pulse
	48	0.0	0.0		98	→	pulse		98	→	pulse
	49	0.0	0.0		99	→	pulse		99	→	pulse
	50	0.0	0.0		100	0.0	0.0		100	0.0	0.0

★ System Oscilloscope Waveform

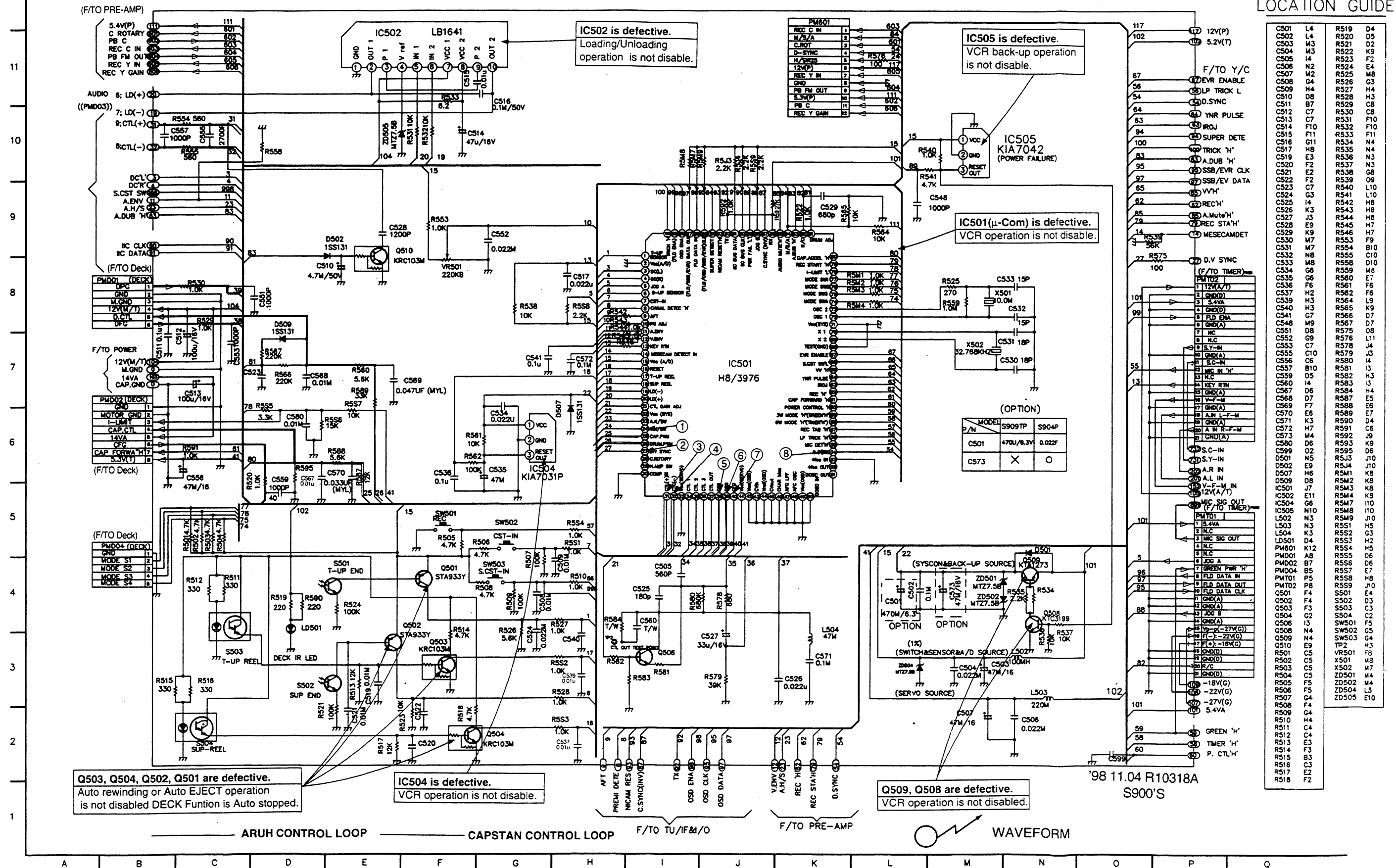


★ TR Voltage Sheet

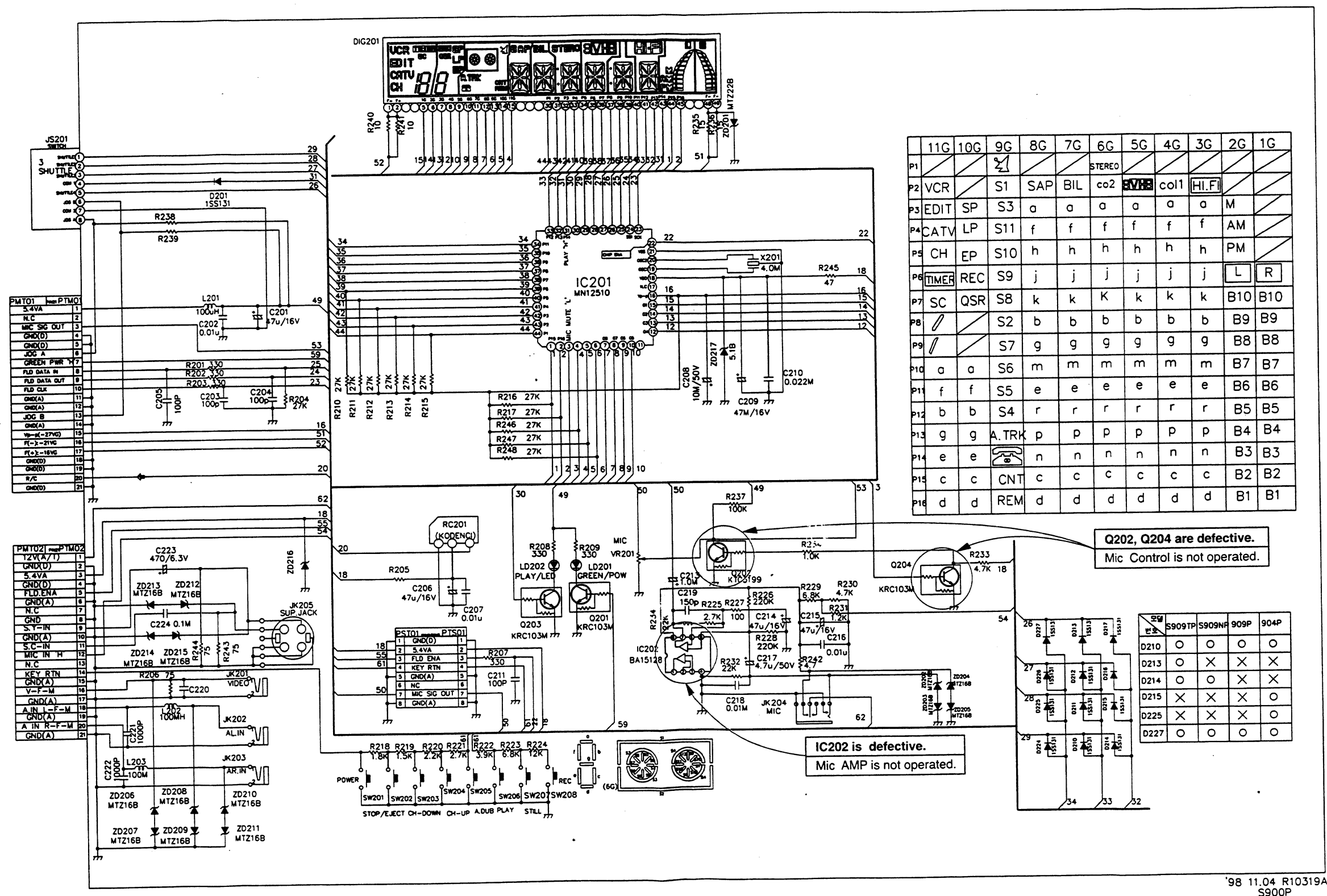
Port TR NO.	Emitter		Collector		Base	
	PB	REC	PB	REC	PB	REC
Q501	5.3	5.3	0.2	0.3	4.8	4.8
Q502	5.3	5.3	0.1	0.5	4.7	4.7
Q503	0.0	0.0	pulse	pulse	pulse	pulse
Q504	0.0	0.0	pulse	pulse	pulse	pulse
Q508	0.0	0.0	0.0	0.0	0.7	0.7
Q509	5.3	5.3	5.3	5.3	4.6	4.5

11. System Circuit Diagram

LOCATION GUIDE

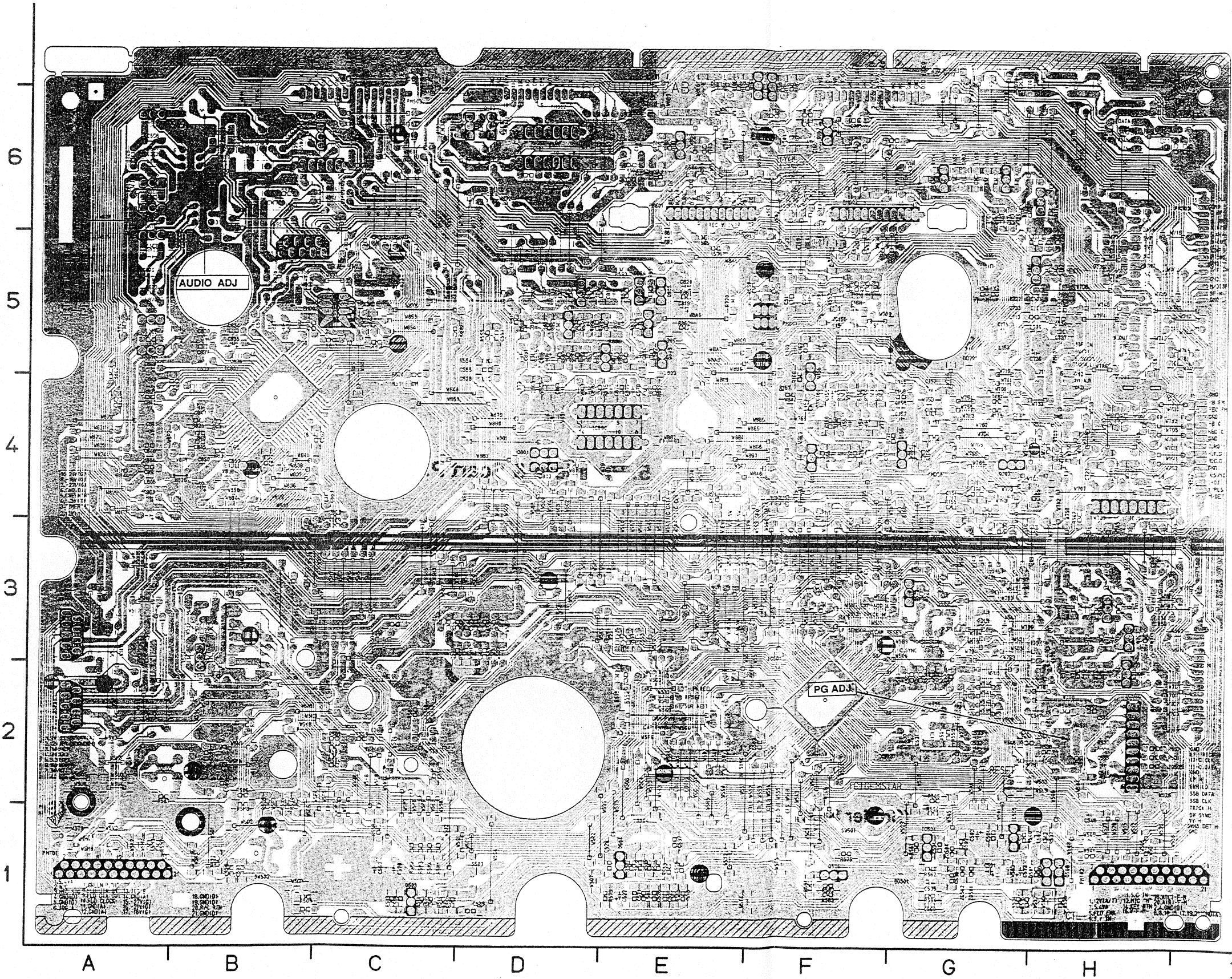


12. Timer Circuit Diagram



'98 11.04 R10319A
S900P

PRINTED CIRCUIT BOARD DIAGRAMS
1. Main P.C.Board



LOCATION GUIDE

Q501	G1	C567	03	C360	A4	Q154	06	R508	B2	R701	06	S502	03
Q502	G1	C368	03	C361	A4	Q155	06	R509	B2	R702	06	S503	03
Q503	G1	C369	03	C362	A4	Q156	06	R510	B2	R703	06	S504	03
Q504	G1	C370	03	C363	A4	Q157	06	R511	B2	R704	06	S505	03
Q505	G1	C371	03	C364	A4	Q158	06	R512	B2	R705	06	S506	03
Q506	G1	C372	03	C365	A4	Q159	06	R513	B2	R706	06	S507	03
Q507	G1	C373	03	C366	A4	Q160	06	R514	B2	R707	06	S508	03
Q508	G1	C374	03	C367	A4	Q161	06	R515	B2	R708	06	S509	03
Q509	G1	C375	03	C368	A4	Q162	06	R516	B2	R709	06	S510	03
Q510	G1	C376	03	C369	A4	Q163	06	R517	B2	R710	06	S511	03
Q511	G1	C377	03	C370	A4	Q164	06	R518	B2	R711	06	S512	03
Q512	G1	C378	03	C371	A4	Q165	06	R519	B2	R712	06	S513	03
Q513	G1	C379	03	C372	A4	Q166	06	R520	B2	R713	06	S514	03
Q514	G1	C380	03	C373	A4	Q167	06	R521	B2	R714	06	S515	03
Q515	G1	C381	03	C374	A4	Q168	06	R522	B2	R715	06	S516	03
Q516	G1	C382	03	C375	A4	Q169	06	R523	B2	R716	06	S517	03
Q517	G1	C383	03	C376	A4	Q170	06	R524	B2	R717	06	S518	03
Q518	G1	C384	03	C377	A4	Q171	06	R525	B2	R718	06	S519	03
Q519	G1	C385	03	C378	A4	Q172	06	R526	B2	R719	06	S520	03
Q520	G1	C386	03	C379	A4	Q173	06	R527	B2	R720	06	S521	03
Q521	G1	C387	03	C380	A4	Q174	06	R528	B2	R721	06	S522	03
Q522	G1	C388	03	C381	A4	Q175	06	R529	B2	R722	06	S523	03
Q523	G1	C389	03	C382	A4	Q176	06	R530	B2	R723	06	S524	03
Q524	G1	C390	03	C383	A4	Q177	06	R531	B2	R724	06	S525	03
Q525	G1	C391	03	C384	A4	Q178	06	R532	B2	R725	06	S526	03
Q526	G1	C392	03	C385	A4	Q179	06	R533	B2	R726	06	S527	03
Q527	G1	C393	03	C386	A4	Q180	06	R534	B2	R727	06	S528	03
Q528	G1	C394	03	C387	A4	Q181	06	R535	B2	R728	06	S529	03
Q529	G1	C395	03	C388	A4	Q182	06	R536	B2	R729	06	S530	03
Q530	G1	C396	03	C389	A4	Q183	06	R537	B2	R730	06	S531	03
Q531	G1	C397	03	C390	A4	Q184	06	R538	B2	R731	06	S532	03
Q532	G1	C398	03	C391	A4	Q185	06	R539	B2	R732	06	S533	03
Q533	G1	C399	03	C392	A4	Q186	06	R540	B2	R733	06	S534	03
Q534	G1	C400	03	C393	A4	Q187	06	R541	B2	R734	06	S535	03
Q535	G1	C401	03	C394	A4	Q188	06	R542	B2	R735	06	S536	03
Q536	G1	C402	03	C395	A4	Q189	06	R543	B2	R736	06	S537	03
Q537	G1	C403	03	C396	A4	Q190	06	R544	B2	R737	06	S538	03
Q538	G1	C404	03	C397	A4	Q191	06	R545	B2	R738	06	S539	03
Q539	G1	C405	03	C398	A4	Q192	06	R546	B2	R739	06	S540	03
Q540	G1	C406	03	C399	A4	Q193	06	R547	B2	R740	06	S541	03
Q541	G1	C407	03	C400	A4	Q194	06	R548	B2	R741	06	S542	03
Q542	G1	C408	03	C401	A4	Q195	06	R549	B2	R742	06	S543	03
Q543	G1	C409	03	C402	A4	Q196	06	R550	B2	R743	06	S544	03
Q544	G1	C410	03	C403	A4	Q197	06	R551	B2	R744	06	S545	03
Q545	G1	C411	03	C404	A4	Q198	06	R552	B2	R745	06	S546	03
Q546	G1	C412	03	C405	A4	Q199	06	R553	B2	R746	06	S547	03
Q547	G1	C413	03	C406	A4	Q200	06	R554	B2	R747	06	S548	03
Q548	G1	C414	03	C407	A4	Q201	06	R555	B2	R748	06	S549	03
Q549	G1	C415	03	C408	A4	Q202	06	R556	B2	R749	06	S550	03
Q550	G1	C416	03	C409	A4	Q203	06	R557	B2	R750	06	S551	03

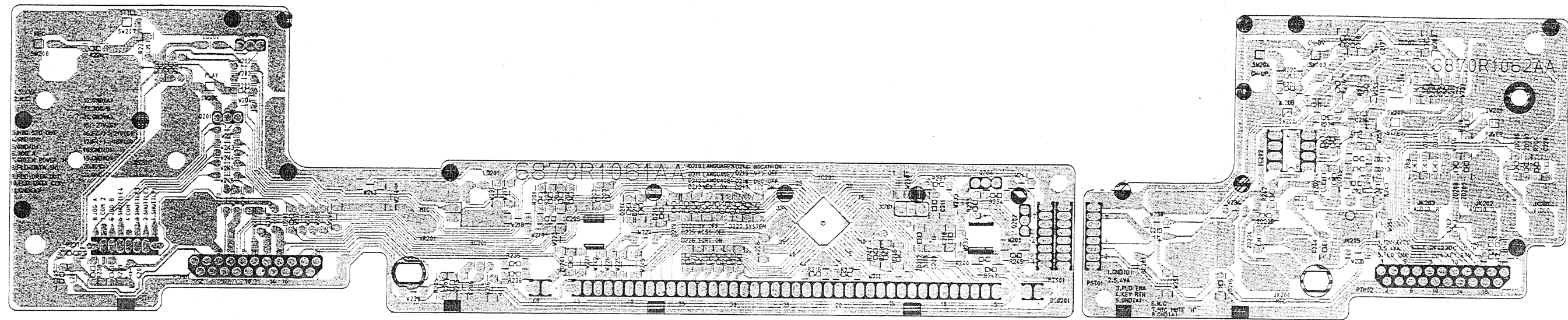
ABBREVIATIONS

- PG : Pulse Generator
- ADJ : Adjustment

NOTE: ● : Measurement Point
□ : Adjustment Point
E : Emitter TRANSISTOR
C : Collector
B : Base

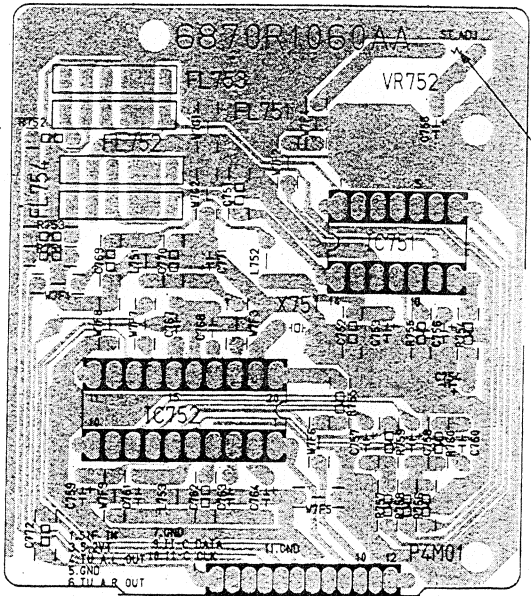
(Solder Side)

6. Timer P.C.Board



(Solder Side)

7. 2 Carrier P.C.Board



(Solder Side)

STEREO SEP ADJ

ABBREVIATIONS	
PG	Pluse Generator
ADJ	Adjustment
NOTE:	
●	Measurement Point
□	Adjustment Point
○	Emitter: TRANSISTOR
○	Collector
○	Base

FRONT LOADING MECHANISM DISASSEMBLY

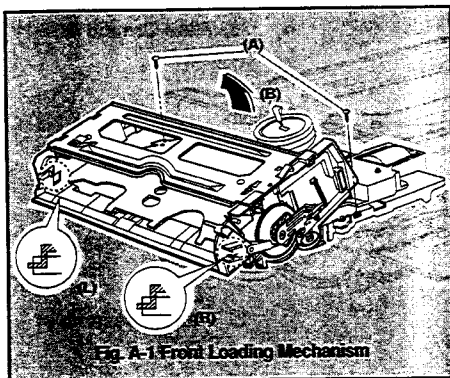
1. Front Loading Mechanism Assembly (Fig. A-1)

- 1) Remove the Top and Bottom Covers and Front Panel.
- 2) Remove two screws(A).
- 3) Lift up the Front Loading Mechanism Assembly in the direction of arrow(B).

NOTE

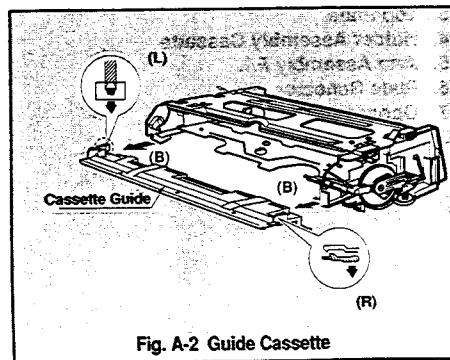
When disassembling and reassembling:

- ① Give special attention to removal and to reassembly because two tabs(L), (R) are engaged.



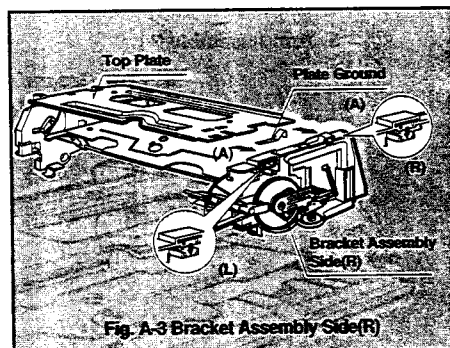
2. Guide Cassette (Fig. A-2)

- 1) Push tab(R) of the Cassette Guide and disengage with Bracket Side(R) and push tab(L) of the cassette Guide which is engaged with Bracket Side(L) and remove it in the direction of arrow (B).



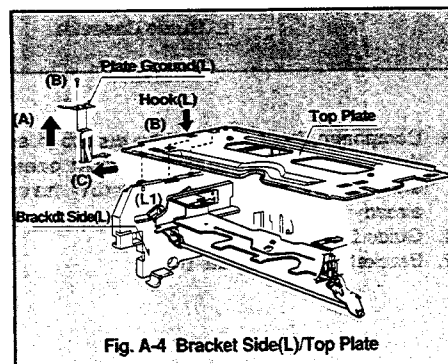
3. Bracket Assembly Side (R) (Fig. A-3)

- 1) Push the tabs(L), (R) of Bracket Assembly Side(R) to disengage with the Top Plate and remove it in the direction of arrow(A).



4. Bracket Side(L)/Top Plate (Fig. A-4)

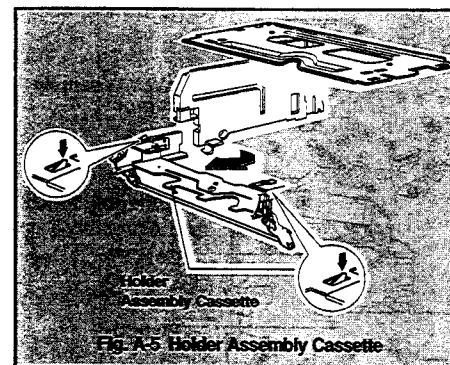
- 1) Remove the screw(B).
- 2) Remove the plate Ground(L), in the direction of arrow(A).
- 3) Push the locking tab(L1) and then remove the Bracket Side(L) in the direction of arrow(B).
- 4) The Top Plate can be removed by Separating the Bracket Side(L).



FRONT LOADING MECHANISM DISASSEMBLY

5. Holder Assembly Cassette (Fig. A-5)

- 1) Separate the Bracket Assembly Side(R).
- 2) Push the two lever tabs(L), (R) down and separate the Holder Assembly Cassette and the Arm Assembly F/L from the Top Plate.



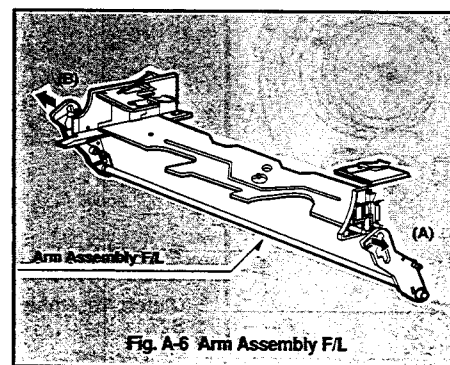
6. Arm Assembly F/L (Fig. A-6)

- 1) Remove by pulling the Arm F/L(R) from the Bracket Holder(R) Boss in the direction of arrow(A).
- 2) Separate the Arm Assembly F/L from Cassette Holder Boss in the direction of arrow(B).

NOTE

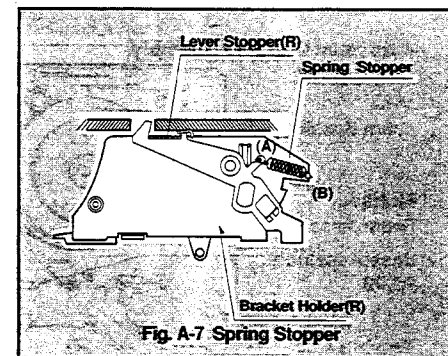
When disassembling and reassembling:

- ① Be sure to remove the Arm F/L(R) first. If not the Arm Assembly F/L can be damaged.



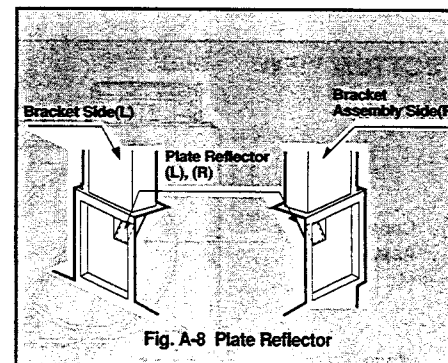
7. Spring Stopper (Fig. A-7)

- 1) Remove the Spring Stopper which is connected to the tabs(A), (B) of the Lever Stopper(R) and the Bracket Holder(R).



8. Plate Reflector (Fig. A-8)

- 1) Detach the Plate Reflector(L) from the Bracket Side(L) by using a knife.
- 2) Detach the Plate Reflector(R) from the Bracket Assembly Side(R) by using a knife.



SECTION 4 MECHANISM

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MECHANISM TROUBLESHOOTING GUIDE

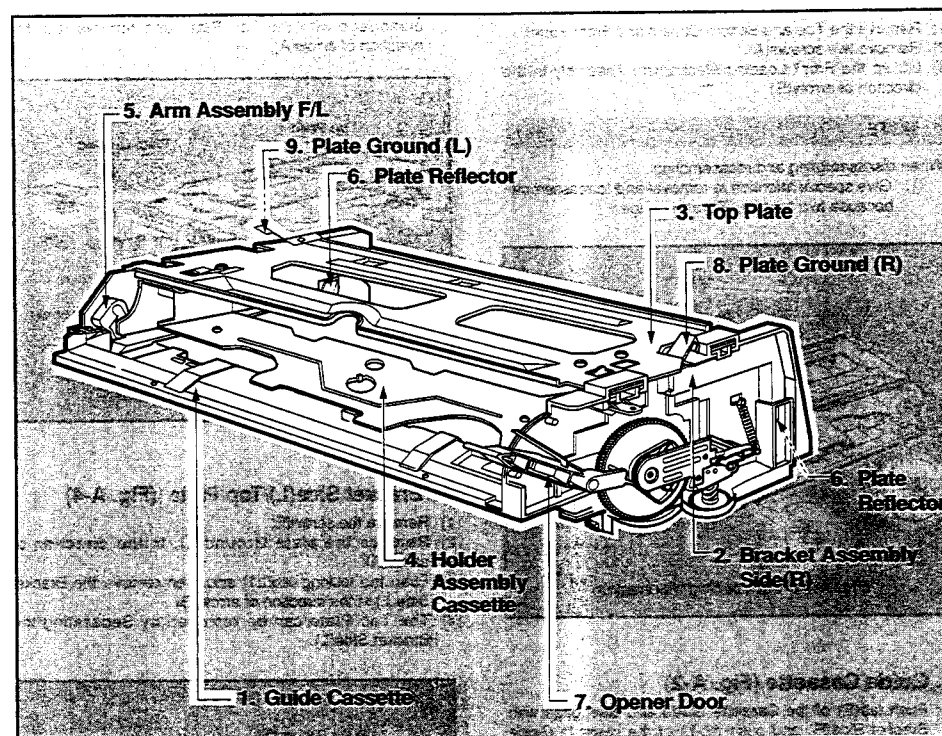
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EXPLODED VIEWS

- 1. Moving Mechanism Section (1) 4-34
- 2. Moving Mechanism Section (2) 4-35
- 3. Front Loading Mechanism Section 4-36

FRONT LOADING MECHANISM DISASSEMBLY

• Front Loading Mechanism Assembly, Parts Location



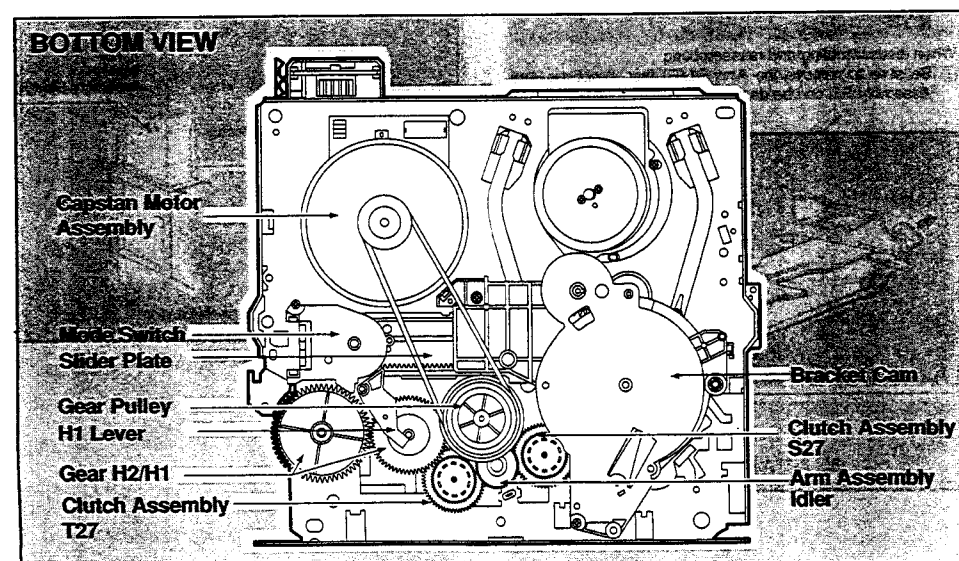
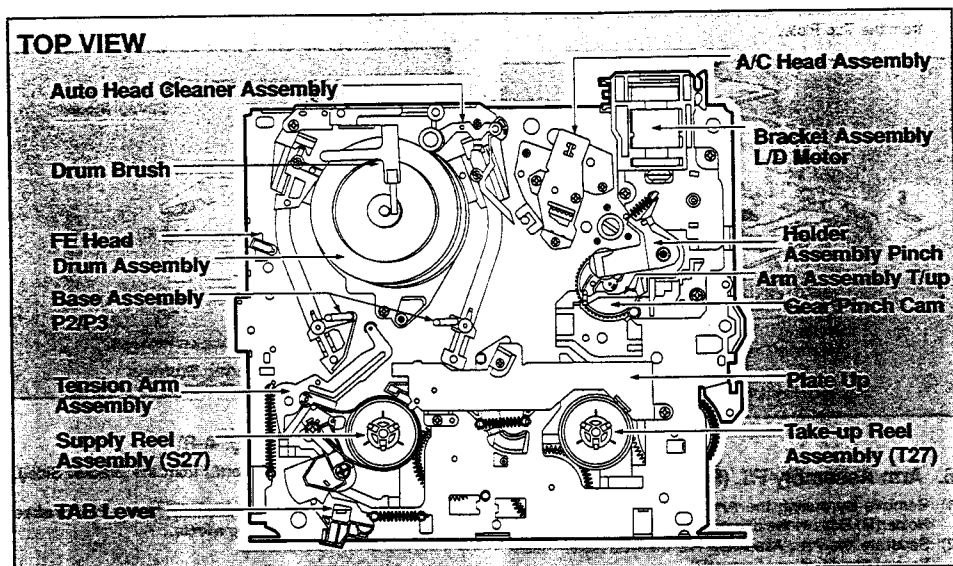
* Component list below will be described as if the top and bottom covers, front panel and deck mechanism assembly have already been removed.

- 1. Guide Cassette
- 2. Bracket Assembly Side (R)

- 3. Top Plate
- 4. Holder Assembly Cassette
- 5. Arm Assembly F/L
- 6. Plate Reflector
- 7. Opener Door
- 8. Plate Ground(R)
- 9. Plate Ground(L)

DECK MECHANISM DISASSEMBLY

● Deck Mechanism Parts Location



DECK MECHANISM DISASSEMBLY

1. Auto Head Cleaner Assembly (Fig. B-1)

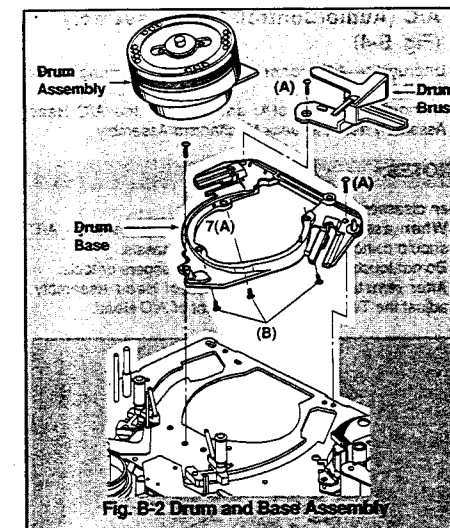
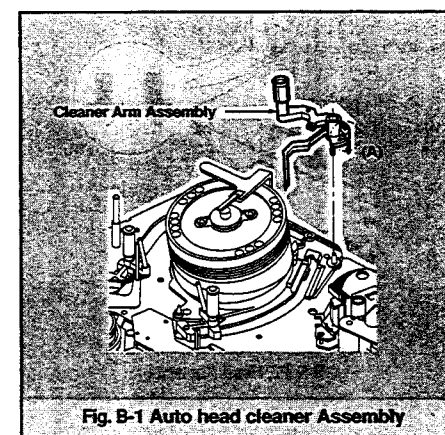
(Optional Item)

- 1) Push the tab(A) of Auto Head Cleaner and remove the Cleaner Arm Assembly.

NOTES:

When disassembling and reassembling:

- ① Do not allow fingers or tools to touch the outside of the Drum.
- ② Be careful not to get any foreign substance on the Roller.



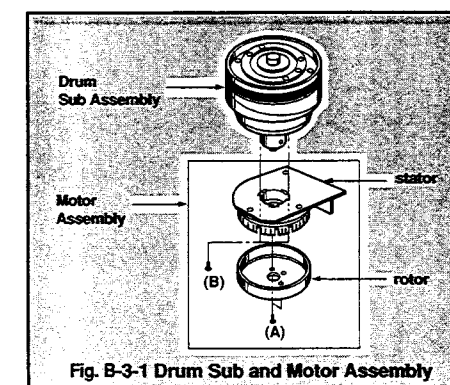
3. Drum Sub Assembly and Motor Assembly (Fig. B-3-1)

- 1) Remove the Drum Base from the Deck Mechanism Assembly.
- 2) Separate the Drum Assembly from the Drum Base.
- 3) Remove two screws(A) and then remove the rotor.
- 4) Remove three screws(B) and then remove the stator.

NOTE

When disassembling and reassembling:

- ① Do not touch the video tips with fingers or tools.



2. Drum and Base Assembly (Fig. B-2)

- 1) Remove the Auto Head Cleaner Assembly. (option)
- 2) Remove three screws(A) and separate the Drum Assembly, Drum Base and the Drum Brush from the Deck Mechanism Assembly.
- 3) Remove three screws(B) on the back side and remove the Drum Assembly from the Drum Base.

NOTES:

When disassembling and reassembling:

- ① Do not touch the video tips with fingers or tools. Give special attention to disassembling and reassembling of Auto Head Cleaner Assembly.
- ② After assembling, adjust the tape transport system and Servo PG.

DECK MECHANISM DISASSEMBLY

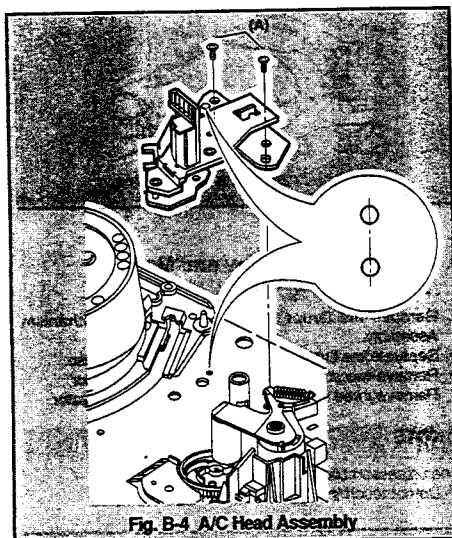
4. A/C (Audio/Control) Head Assembly (Fig. B-4)

- 1) Unplug the A/C connector from the Loading Motor P.C.B.
- 2) Remove two screws(A) and remove the A/C Head Assembly from the Deck Mechanism Assembly.

NOTES:

When disassembling and reassembling:

- ① When assembling, the 3mm hole of the Base A/C should coincide to 3mm hole in the Chassis.
- ② Do not touch the A/C Head Tips with fingers or tools.
- ③ After reinstalling the Audio Control Head Assembly, adjust the Tilt, Azimuth and Height of A/C Head.



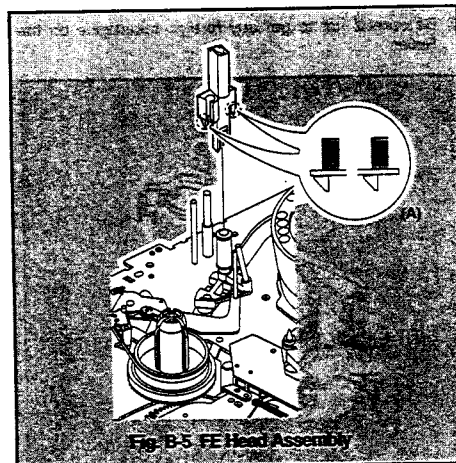
5. FE (Full Erase) Head Assembly (Fig. B-5) (Optional Item)

- 1) Push two tabs(A) and remove the FE Head.

NOTE

When disassembling and reassembling:

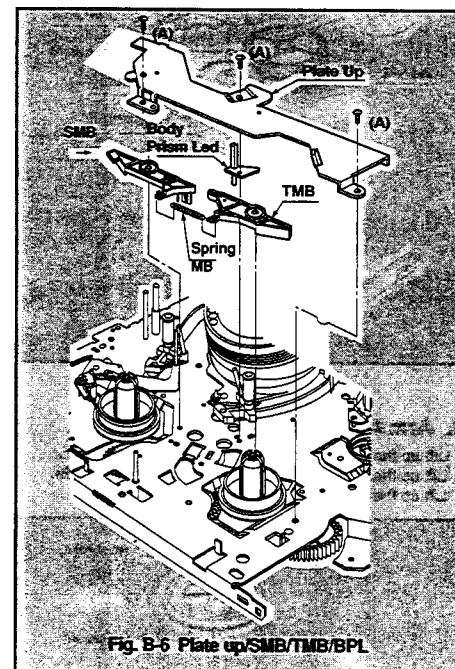
- ① Be careful not to get any foreign substance on the FE Head.



DECK MECHANISM DISASSEMBLY

6. Plate Up/Supply Main Brake/Take up Main Brake/Body Prism Led Assembly (Fig. B-6)

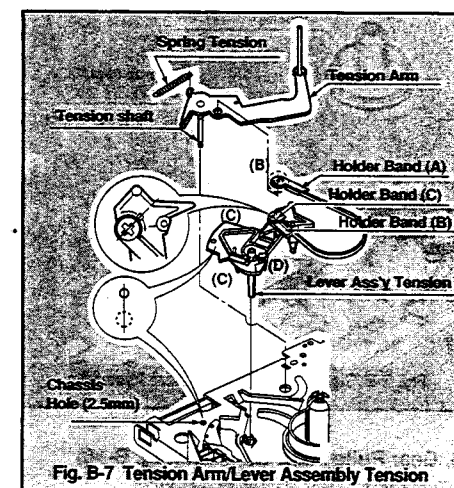
- 1) Plate Up
 - ① Remove three screws(A) and remove the Plate Up.
- 2) Supply Main Brake
 - ① Remove the Spring MB.
 - ② Lift up the Supply Main Brake.
- 3) Take-Up Main Brake
 - ① Lift up the Take-Up Main Brake.
- 4) Body Prism Led
 - ① Remove the Body Prism Led.



NOTES:

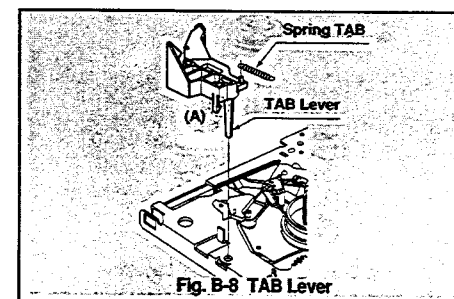
When disassembling and reassembling:

- ① (D) is engaged to the cam groove of the Gear Cam L/D and two tabs(C) are engaged in the chassis. (care must be taken not to damage the two tabs when disassembling and reassembling)
- ② When disassembling, turn to the counterclockwise and lift up so that grease which may be on (D) is not transferred to the Reel Brake Drum.
- ③ When assembling, the 2.5mm hole of the Lever Assembly Tension should be aligned with the 2.5mm hole in the chassis.
- ④ After reassembling, adjust the Tension.



8. TAB Lever (Fig. B-8) (Optional Item)

- 1) Remove the Lever Ass'y Tension.
- 2) Remove the Spring TAB.
- 3) Push the tab(A) on the bottom side of TAB Lever and remove the TAB Lever.



7. Tension Arm/Lever Assembly Tension (Fig. B-7)

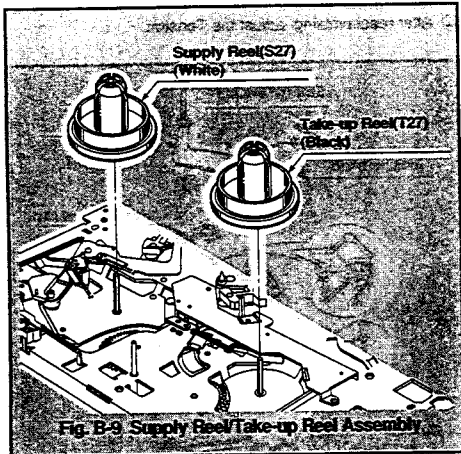
- 1) Remove the Spring Tension.
- 2) Push the tab(A) of the Base Tension on the back cover of the Deck Mechanism Assembly outward and remove the Tension Arm Assembly.
- 3) Push the tab(B) on the back side of the Holder Band(A) and remove the Tension Arm Assembly.
- 4) Push two tabs(C) on the bottom side of the Lever Tension and Lift up the Lever Assembly Tension.

DECK MECHANISM DISASSEMBLY

9. Supply Reel/Take Up Reel Assembly (Fig. B-9)

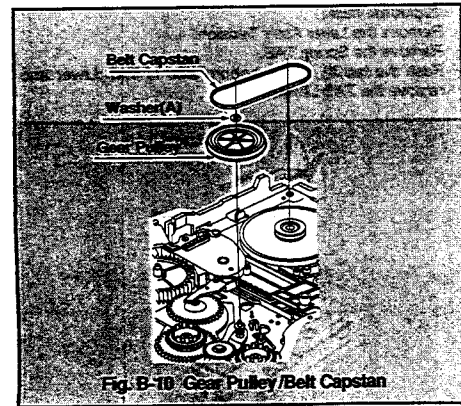
- 1) Lift up Reel(S), (T) after removing the Plate Up and Band Assembly.

- NOTES:
- ① Be sure not to interchange the Take-up Reel and the Supply Reel.
 - ② Do not allow the Brake Drum to come in contact with grease.



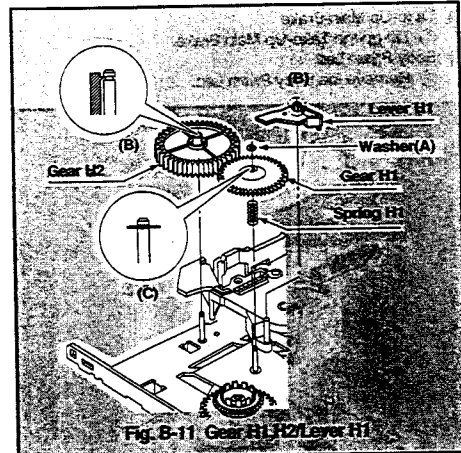
10. Gear Pulley/Belt Capstan (Fig. B-10)

- 1) Turn over the Deck Mechanism Assembly.
- 2) Remove the Belt Capstan.
- 3) Remove the washer(A) and then lift up the Gear Pulley.



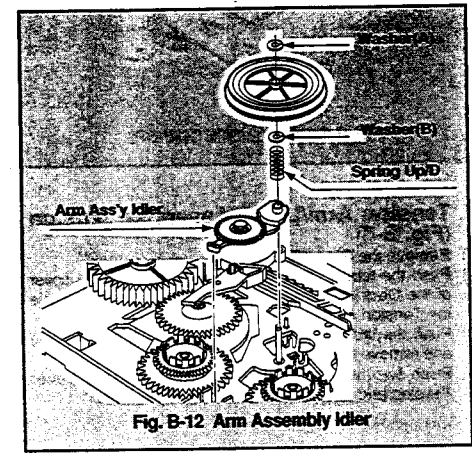
11. Gear H1, H2/Lever H1 (Fig. B-11)

- 1) Push and lift up the hook(B) of Lever H1.
- 2) Remove the washer(A) and then lift up the Gear H1.
- 3) Lift up the Spring H1.
- 4) Push and lift up the hook(B) of the Gear H2.



12. Arm Assembly Idler (Fig. B-12)

- 1) Lift up the Gear Pulley after removing the washer(A).
- 2) Lift up the Spring Up/D after removing the washer(B).
- 3) Lift up the Arm Assembly Idler.

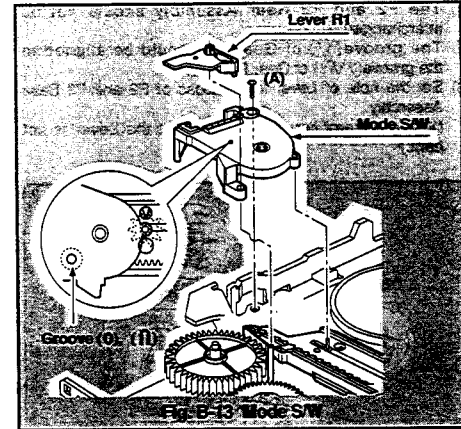


DECK MECHANISM DISASSEMBLY

13. Mode S/W (Fig. B-13)

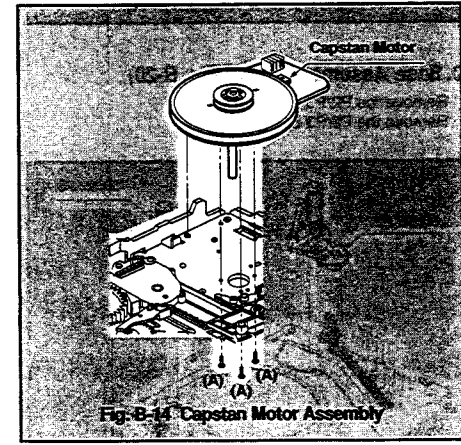
- 1) Lift up the Lever H1.
- 2) Remove the screw(A) and lift up the Mode S/W.

- NOTE
- ① When assembling mode, the groove of Gear (□) and Body (○) of the Mode Switch should be aligned.



14. Capstan Motor Assembly (Fig. B-14)

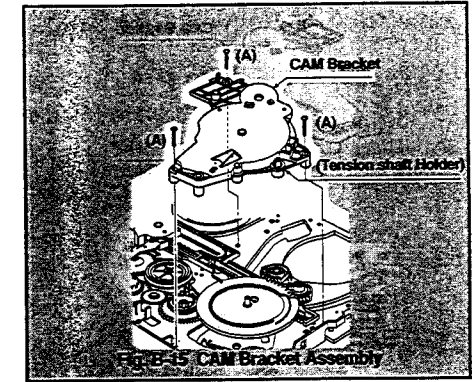
- 1) Remove three Screws(A) on the top side and remove the Capstan Motor Assembly.



15. CAM Bracket Assembly (Fig. B-15)

- 1) Remove three screws(A).
- 2) Remove the CAM Bracket Assembly.

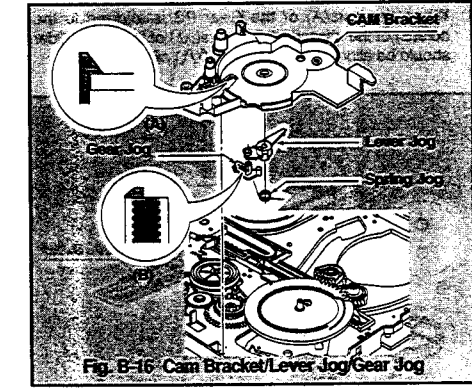
- NOTE
- ① The (Tension Shaft Holder) fixes the Tension Shaft on Fig B-7, therefore when the CAM Bracket Assembly is removed, First remove the Tension Arm on Fig B-7.



16. Cam Bracket/Lever Jog/Gear Jog (Fig. B-16) (Optional Item)

- 1) Remove the Cam Bracket Assembly.
- 2) Remove the Spring Jog.
- 3) Push the tab(A) and remove the Lever Jog.
- 4) Push the tab(B) and remove the Gear Jog.

- NOTE
- ① The tab(B) on the Gear Jog should be in groove of the Lever Jog.



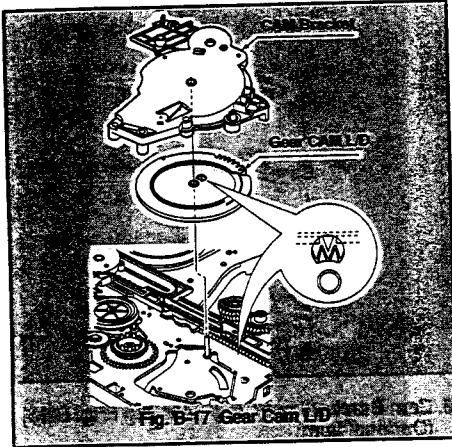
DECK MECHANISM DISASSEMBLY

17. Gear Cam L/D (Fig. B-17)

- 1) Remove the Cam Bracket Assembly.
- 2) Remove the Gear Cam L/D.

NOTE

- 1) When assembling the Gear Cam L/D, the groove (Λ) of Plate Slider should coincide with the groove (V) on the Gear Cam L/D.

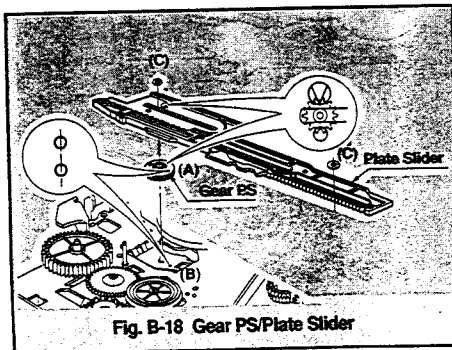


18. Gear PS/Plate Slider (Fig. B-18)

- 1) Remove two washers(C).
- 2) Remove the Plate Slider.
- 3) Remove the Gear PS.

NOTE

- 1) When the hole(A) of the Gear PS is aligned to the hole(B) of the chassis, the groove(V) of the Plate Slider should be aligned to the groove(Λ) of the Gear PS.



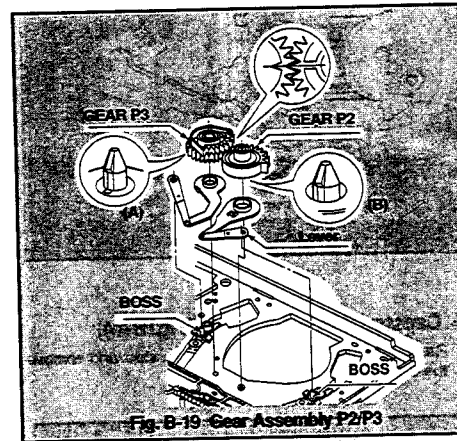
19. Gear Assembly P2/P3 (Fig. B-19)

- 1) Remove the Plate Slider.
- 2) Remove by pushing one hook(B) on the top side of Gear Assembly P3.
- 3) Remove by pushing one hook(A) on the top side of Gear Assembly P2.

NOTES:

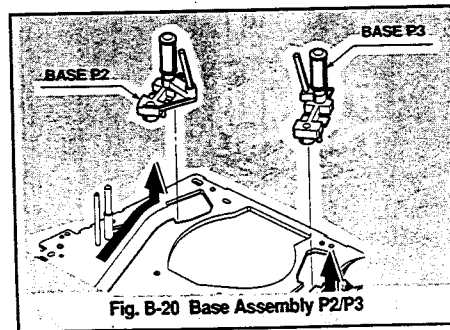
When disassembling and reassembling:

- ① The P2 and P3 Gear Assembly should not be interchanged.
- ② The groove(V) of Gear P2 should be aligned to the groove(Λ) of Gear P3.
- ③ Set the hole of Lever to the Boss of P2 and P3 Base Assembly. (When assembling make sure that the Lever is not bent.)



20. Base Assembly P2/P3 (Fig. B-20)

- 1) Remove the P2/P3 Gear Assembly.
- 2) Remove the P2/P3 Base Assembly.



DECK MECHANISM DISASSEMBLY

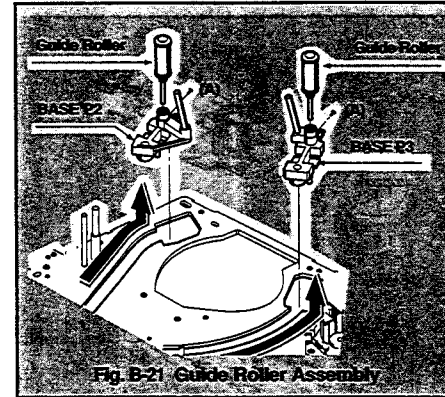
21. Guide Roller Assembly (Fig. B-21)

- 1) Remove two screws(A).
- 2) Remove the Guide Roller From the Base P2/P3 by turning it.

NOTE

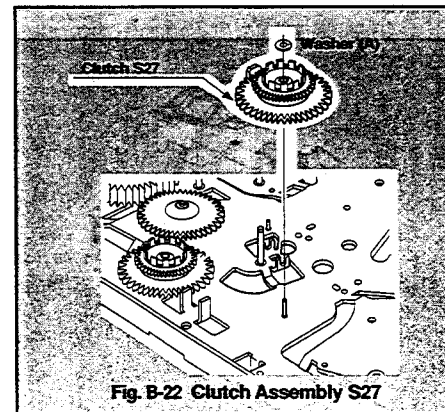
When disassembling and reassembling:

- ① The P2 and P3 Base should not be interchanged.



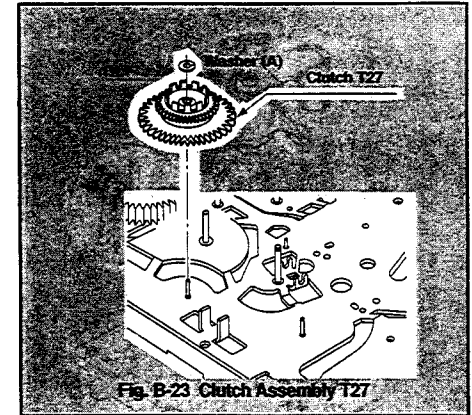
22. Clutch Assembly S27 (Fig. B-22)

- 1) Remove the Gear Cam L/D and the Arm Assembly Idler.
- 2) Remove the washer(A).
- 3) Remove the Clutch Assembly S27.



23. Clutch Assembly T27 (Fig. B-23)

- 1) Remove the Gear H1 and Arm Assembly Idler.
- 2) Remove the washer(A).
- 3) Remove the Clutch Assembly T27.

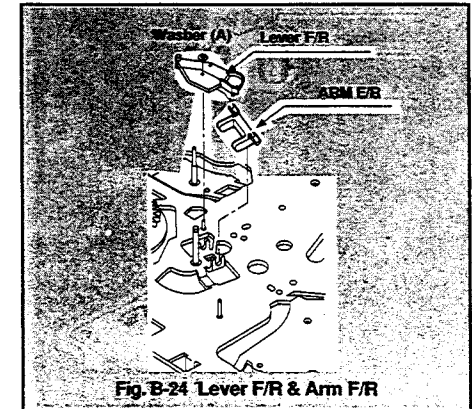


24. Lever F/R & Arm F/R (Fig. B-24)

- 1) Remove the Plate Slider.
- 2) Remove the washer(A).
- 3) Remove the Lever F/R.
- 4) Remove the Arm Assembly Idler.
- 5) Remove the Arm F/R.

NOTE

- 1) When disassembling the Arm F/R should be horizontal.



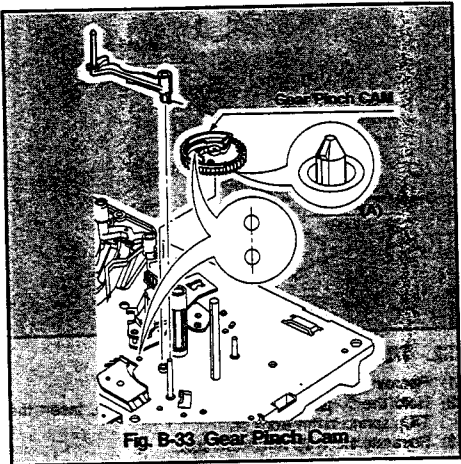
DECK MECHANISM DISASSEMBLY

33. Gear Pinch Cam (Fig. B-33)

- 1) Remove the T/Up Arm Assembly.
- 2) Remove by pushing one tab(A) on the bottom side of the Gear Pinch Cam.

NOTE

When disassembling and reassembling:
① The small hole on the Gear Pinch Cam and hole of chassis should be aligned.



MECHANISM ADJUSTMENT

● Tools and Fixtures for Deck

1. Cassette Torque meter Parts No: D00-D006	2. Alignment tape Parts No NTSC: DTN-0001 PAL: DTN-0002	3. Torque gauge Parts No: D00-D002
4. Torque gauge adaptor Parts No: D09-R001	5. Post height adjusting driver Parts No: BTL-0005	6. + Type driver (e5) Obtain locally

DECK MECHANISM DISASSEMBLY

25. Holder Pinch Assembly (Fig. B-25)

- 1) Separate the Holder Pinch Assembly by pushing tab(A) on the L/D Motor Bracket in the direction of arrow (B).

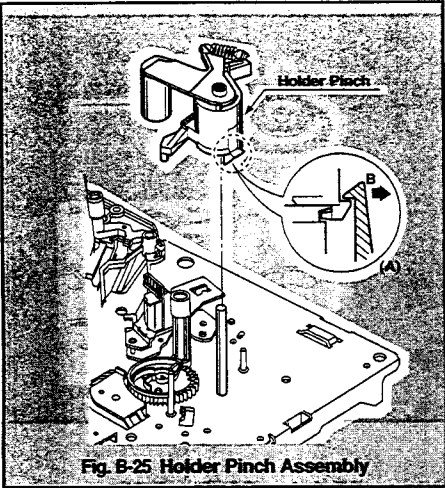


Fig. B-25 Holder Pinch Assembly

26. Pinch Arm Assembly (Fig. B-26)

- 1) Remove the Spring Pinch.
- 2) Remove the Pinch Arm Assembly by turning it counterclockwise.

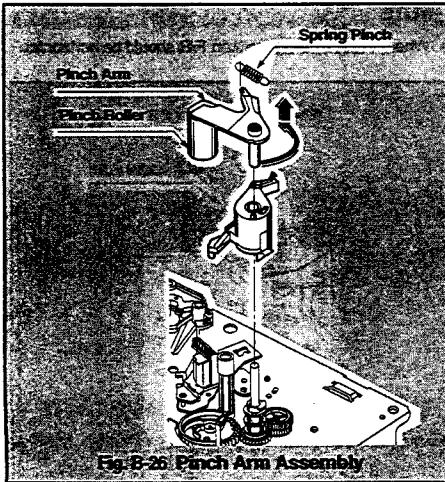


Fig. B-26 Pinch Arm Assembly

27. L/D Motor Bracket Assembly (Fig. B-27)

- 1) Remove three Screws(A).
- 2) Push the tabs(A) and remove the L/D Motor Bracket Assembly.

NOTES:

When assembling and disassembling:

- ① Make sure Grease from the Gear Pinch does not come in contact with the wing of the L/D Motor Bracket.

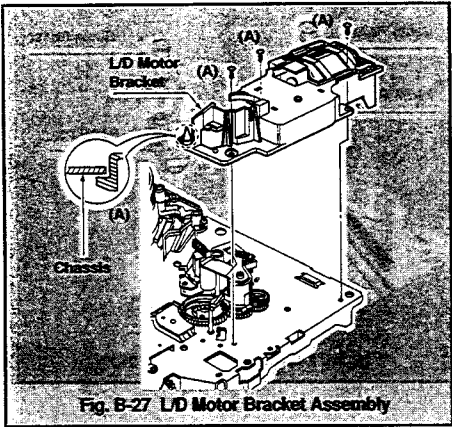


Fig. B-27 L/D Motor Bracket Assembly

28. Worm Wheel (Fig. B-28)

- 1) Remove the L/D Motor Bracket Assembly.
- 2) Push two Tabs(A) on the L/D Motor Bracket and then remove it.

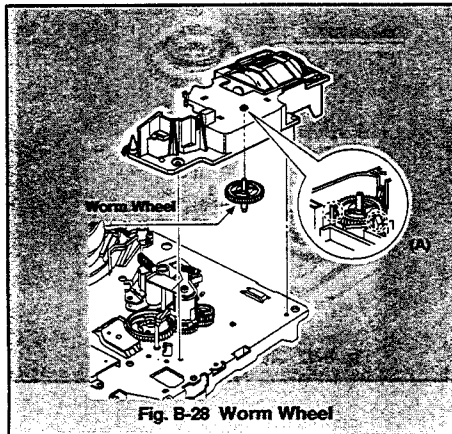


Fig. B-28 Worm Wheel

DECK MECHANISM DISASSEMBLY

29. L/D Motor Assembly & Worm L/D Motor & L/D Motor Bracket (Fig. B-29)

- 1) Remove the L/D Motor Bracket Assembly.
- 2) Push the L/D Motor Assembly in lower direction and then remove.
- 3) Remove the Worm L/D Motor from the L/D Motor Assembly in the direction of arrow (A).
- 4) Remove the L/D Motor Assembly and the Worm L/D Motor and then L/D Motor Bracket is removed.

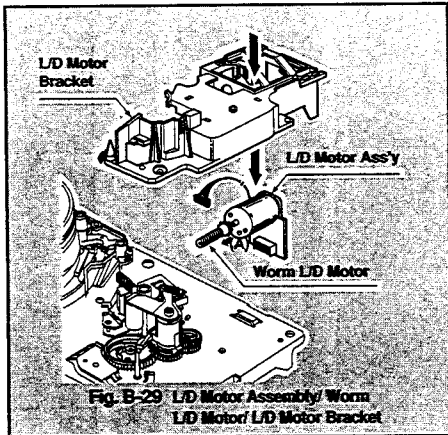


Fig. B-29 L/D Motor Assembly/ Worm L/D Motor/ L/D Motor Bracket

30. Gear CNT (Fig. B-30)

- 1) Remove the L/D Motor Bracket Assembly.
- 2) Remove the Pinch Arm Assembly.
- 3) Remove the Gear CNT.

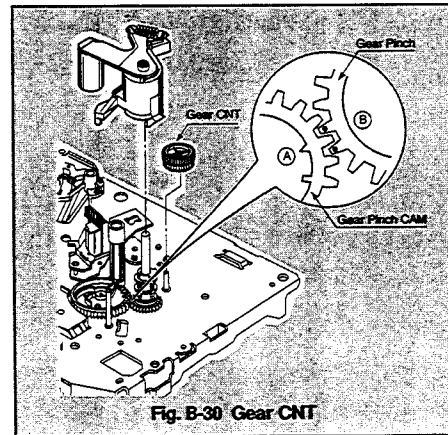


Fig. B-30 Gear CNT

31. Gear Pinch (Fig. B-31)

- 1) Remove the Pinch Arm Assembly.
- 2) Remove the Gear CNT.
- 3) Remove the Gear Pinch.
- 4) When reassembling, make sure that the two teeth, Gear pinch CAM(A) and Gear pinch(B), with timing marks line up with the arrow at two o'clock on the Pinch Cam Gear. (See Fig on B-30)

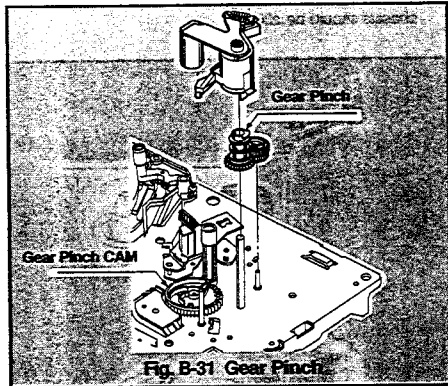


Fig. B-31 Gear Pinch

32. T/Up Arm Assembly (Fig. B-32)

- 1) Remove the L/D Motor Bracket Assembly.
- 2) Hold the ④ part of T/Up Arm, at this time, insert the T/Up spring in the Hook ⑤.
- 3) Separate the T/Up Arm Assembly.
- 4) Remove the T/Up spring.

NOTES:

When reassembling,

- ① Insert the T/Up spring in the Hook ⑤ as above No. 32. 2).
- ② Place the T/Up Arm Assembly at the back of ③ part.

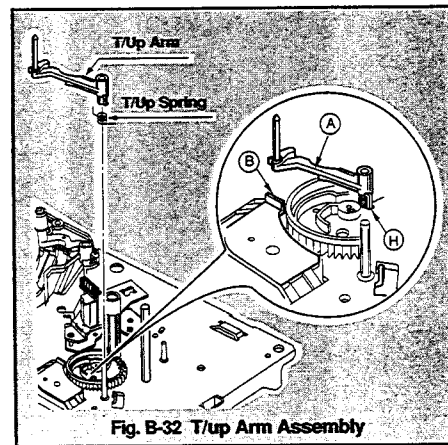


Fig. B-32 T/Up Arm Assembly

MECHANISM ADJUSTMENT

4. Checking Torque

Purpose: To insure smooth transport of the tape during each mode of operation. If tape transport is abnormal, then check the torque as indicated by the chart below.

Test Equipment / Fixture		Test Conditions VCR(VCP) State		
- Torque Gauge(600 g/cm ATG) - Torque Gauge Adaptor - Cassette Torque Meter - V_rNTSC: 16.67msec - L_rPAL: 20msec		Set the VCR to each operating mode without inserting a cassette. (See '2. Preparation for Adjustment'. Page 4-17)		
Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Slack Removal Torque	Unloading	Cassette Torque Meter	Supply Reel	More than 150~270g·cm
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 500g·cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 500g·cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	55~95g·cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	170~250g·cm

Checking Method:

The Values are measured by using a torque gauge and torque gauge adaptor with the torque gauge affixed.

NOTE
The torque reading to measure occurs when the tape abruptly changes direction from fast forward or rewind mode, when quick braking is applied to both reels.

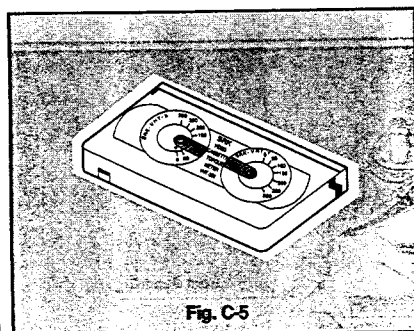


Fig. C-5

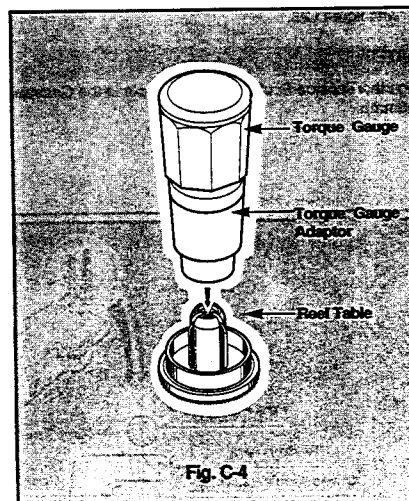


Fig. C-4

MECHANISM ADJUSTMENT

5. Guide Roller Height Adjustment

Purpose: To regulate the height of the tape so that the bottom of the tape runs along the tape guide line on the lower drum.

A. Preliminary Adjustment

Test Equipment / Fixture	Test Conditions VCR(VCP) State	Adjustment Point
- Post Height Adjusting Driver - Hexagonal Wrench or Allen Wrench Phillips screw driver	Allows a good tape to play normally in spite of a damaged guide roller.	Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.

Adjustment Procedure

- 1) Perform the precise adjustment(See below B).
- 2) If the Guide Roller is damaged, loosen the Guide Roller retaining screw and replace the Guide Roller.
- 3) Adjust the height of P2, P3 so that TAPE is adjacent to the guide line.

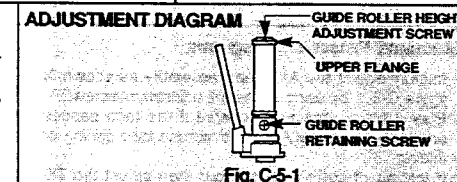


Fig. C-5-1

B. Precise Adjustment

Test Equipment / Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Point
- Oscilloscope - Alignment Tape - Post Height Adjusting Driver	- CH-1: PB RF Envelope - CH-2: NTSC: SW 30Hz PAL : SW 25Hz - Head Switching Output Point - RF Envelope Output Point	Play an alignment tape	Guide Roller Height Adjustment Screws.

Adjustment Procedure

- 1) Play an alignment tape after connecting the probe of the oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.
- 2) Tracking Control (in PB mode): Center position (When this adjustment is performed after the drum assembly has been replaced, set the tracking control so that the RF output is maximum.)
- 3) Height adjustment screw: Flatten the RF waveform. (Fig. C-5-2)
- 4) Turn (Move) the tracking control (in the Playback mode) clockwise and counterclockwise. (Fig. C-5-3))
- 5) Check that any drop of RF output is uniform at the start and end of the waveform.

CAUTION

If the adjustment is excessive or insufficient the tape will jam or fold.

Waveform Diagrams

P2 POST ADJUSTMENT



Fig. C-5-2

P3 POST ADJUSTMENT

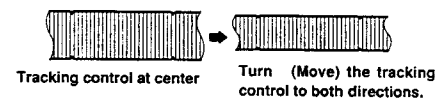
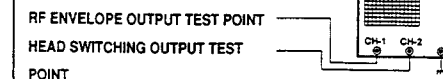


Fig. C-5-3

Connection Diagram

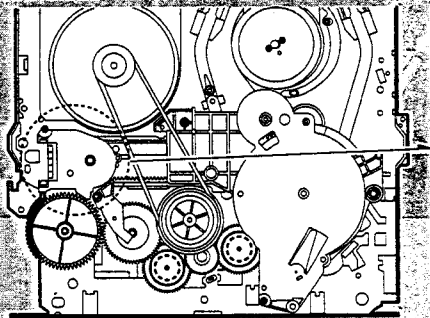


MECHANISM ADJUSTMENT

1. Mechanism and Mode Switch Alignment Check

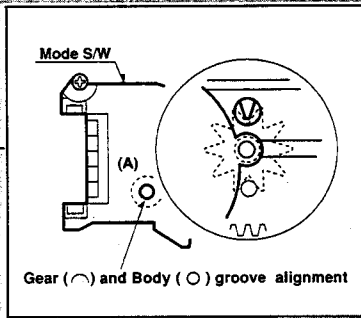
Purpose: To determine if the mode switch and mechanism are in the correct position, when a tape is ejected from the loading mechanism.		
Test Equipment / Fixture	Test Conditions VCR (VCP) State	Check Point
• Blank tape	• Eject Mode (with cassette ejected)	• Mechanism and Mode Switch Position
1) Turn power on and eject the cassette by pressing the eject button. 2) Remove the top and bottom covers. 3) Visually check the alignment of the Pinch Cam gear and PS gear holes, line up with holes in the chassis (figure C-2). 4) If the gears in step 3 do not align as indicated, then rotate the shaft of the loading motor to either the clockwise or counterclockwise direction until alignment does occur. 5) Turn the unit over and remove the main P.C.B thus exposing the bottom side of the deck mechanism. 6) Check the alignment of the mode switch as illustrated in figure C-1, (A). 7) If the alignment is incorrect then remove the mode switch and align as shown in figure C-1 with out changing the position of the Pinch Cam gear and PS gear. 8) Remount the mode switch and main P.C.B assembly and check operation.		

CHECK DIAGRAM

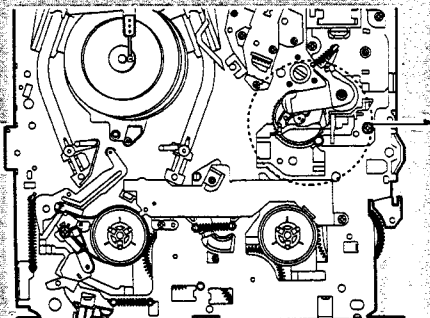


BOTTOM VIEW

Fig. C-1

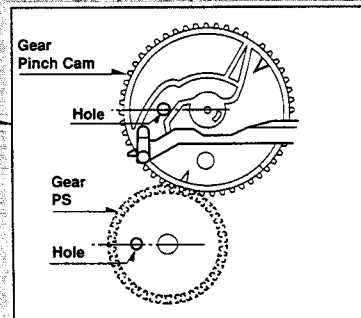


Gear () and Body () groove alignment



TOP VIEW

Fig. C-2



MECHANISM ADJUSTMENT

2. Preparation for Adjustment (To set VCR (VCP) to the loading state without inserting a cassette.)

- 1) Unplug the Power Cord from the AC outlet.
 - 2) Separate the Top Cover and Front Loading Mechanism.
 - 3) Plug the Power Cord into the AC outlet.
 - 4) Turn the VCR on and push the tact switch in the P.C.B. Assembly.
- The VCR can accept inputs for each mode in this case. However the rewind and review operation cannot be performed for more than a few seconds because the take-up reel table is in the stop state and reel pulses cannot be detected.

NOTE

Cover the holes in the end sensors with black tape to prevent a light leak.

3. Tension Post Position and Tension Adjustment

Purpose: To insure uniform tape contact with the video head by maintaining constant tape tension.		
Test Equipment / Fixture	Test Conditions VCR(VCP) State	Adjustment Point
• Cassette Torque Meter (For play 100g/cm)	• Position Adjustment: Play without a cassette • Tension Check: Play	• Holder Band B and C

Position Adjustment

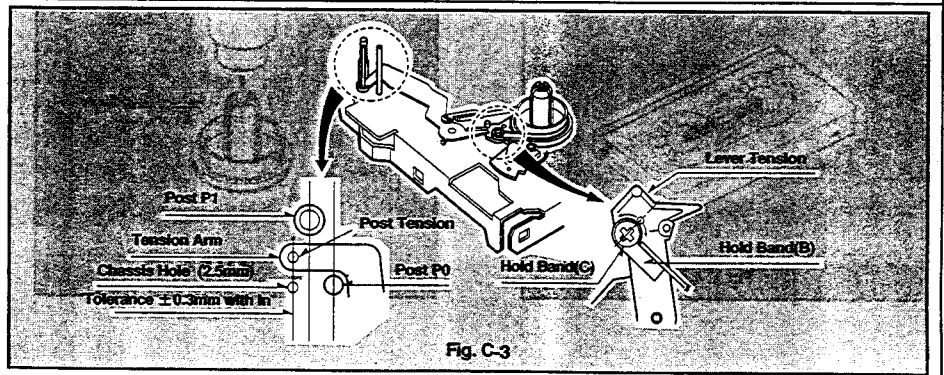
- 1) Remove cassette.
- 2) Adjust the position of tension post in accordance with figure C-3.

NOTE

Align the Tension Post (2mm) to the hole in the Chassis (2.5mm).

Tension Adjustment

- 1) Turn on VCR and load the cassette torque meter.
- 2) Press the play button and observe the torque tension on the supply reel (spec. 37g/cm+5g/cm).
- 3) If torque is out of spec. then use a Phillips screw driver and move the screw head located in the center of the B and C band hold; to either the right or left until correct torque is indicated.



MECHANISM ADJUSTMENT

6. Audio/Control (A/C) Head Adjustment

Purpose: To insure that the tape passes accurately over the audio and control tracks in exact alignment in both the record and playback modes.

- A. Preliminary Adjustment (Height and tilt adjustment)
Perform the Preliminary adjustment, when there is no Audio Output signal with a blank tape.

Test Equipment / Fixture	Test Conditions VCR(VCP) State	Adjustment Points
- Blank Tape - Screw Driver(+) Type 5mm	Play the blank tape (CTL Tape)	- Tilt Adjustment Screw(C) - Height Adjustment Screw(B) - Azimuth Adjustment Screw(A)

Adjustment Procedure /Diagrams

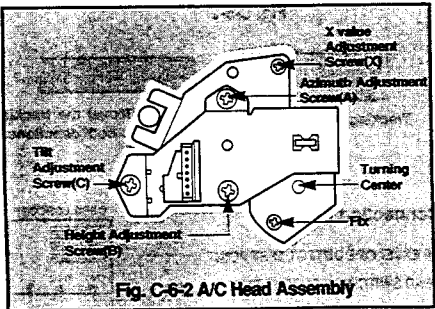
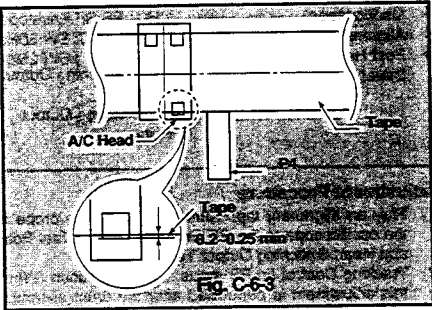
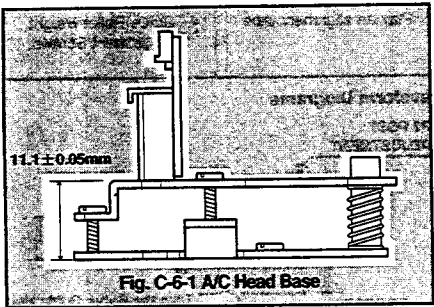
- 1) Initially adjust the A/C head assembly as shown in figure C-6-1, by using the height adjustment screw(B).

2) Play a blank tape and observe if the tape passes accurately over the A/C head without tape curling or folding.

3) If folding or curling does occur then adjust the Tilt adjusting screw(C) while the tape is running to resemble figure C-6-3.
- 4) Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.

NOTE

Ideal A/C head height occurs, when the tape runs between 0.2~0.25mm above the bottom edge of the A/C head core.



MECHANISM ADJUSTMENT

- B. Confirm that the tape passes smoothly between the T/UP guide and the Pinch Roller (Using a mirror or the naked eye).
- 1) After completing step A. (Preliminary Adjustment), check that the tape passes around the T/UP post without folding at the top or bottom.
- If folding is observed, due the following:
- ① If folding is observed at the lower part of the T/UP post, then slowly turn the tilt adjustment in the clockwise direction to eliminate tape the curling.

② If folding is observed at the upper part of the T/UP

post, then slowly turn the tilt adjustment in the counterclockwise direction to eliminate the tape curling.

C. RF Fine Adjustment (only if the RF waveform differs from figure C-5-3).

- 1) Check the RF Envelope after confirming smooth tape transport path at the T/UP Guide/Pinch Roller.

D. Precise Adjustment (Azimuth adjustment)

Test Equipment / Fixture	Test Equipment Connection Point	Test Conditions VCR (VCP) State	Adjustment Points
- Oscilloscope - Alignment tapes - Screw Driver(+) Type 5mm	Audio output jack	Play an alignment tape 1KHz, 7KHz sections.	- Azimuth Adjustment Screw(A) - Tilt Adjustment Screw(C)

Adjustment Procedure

1) Connect the probe of oscilloscope to Audio Output Jack.

2) Alternately adjust the Azimuth adjustment screw(A) and the Tilt adjustment screw(C) for maximum output of the 1KHz and 7KHz segments, while maintaining the flattest envelope differential between the two frequencies.

Fig. C-6-4

7. X-Value Adjustment

Purpose: To obtain compatibility with other VCR(VCP).

Test Equipment / Fixture	Test Equipment Connection Point	Test Conditions VCR (VCP) State	Adjustment diagrams
- Oscilloscope - Alignment tapes - Screw Driver(+) Type 5mm - Post Height Adjusting Driver	- CH-1: PB RF Envelope - CH-2: NTSC: SW 30Hz PAL : SW 25Hz - Head Switching Output Test Point - RF Envelope Output Test Point	Play an alignment tape	Left Right Groove at the Base A/C

Adjustment Procedure

1) Loosen the fixed mounting and X Value adjustment screw.

2) Allow the mechanism to run long enough for auto tracking to complete it's cycle.

3) Move the A/C base laterally in the direction as shown in the diagram to find the center of the peak that allows for the maximum waveform envelope. This method should allow the 30um head to be centrally located over the 60um tape track.

4) Tighten the A/C head assembly mounting screws.

Adjustment Diagram

Connection Diagram

Fig. C-7

MECHANISM ADJUSTMENT

8. Adjustment after Replacing Drum Assembly (Video Heads)

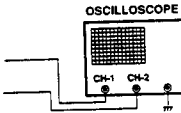
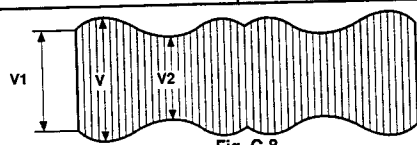
Purpose: To correct for shift in the roller guide and X value after replacing the drum.			
Test Equipment / Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Points
- Oscilloscope - Alignment tape - Blank Tape - Post Height Adjusting Driver - Screw Driver(+) Type 5mm	- CH-1: PB RF Envelope - CH-2: NTSC: SW 30Hz PAL : SW 25Hz - Head Switching Output Test Point - RF Envelope Output Test Point	- Play the blank tape - Play an alignment tape	- Guide Roller Precise Adjustment - Switching Point - Tracking Preset - X-Value
Checking/Adjustment Procedure Play a blank tape and check for tape curling or creasing around the roller guide. If there is a problem then follow the procedure 5. "Guide Roller Height" and 6. "Audio Control(A/C) Head Adjustment".		Connection Diagram 	
Waveform 		$V1/V \text{ MAX} \geq 0.7$ $V2/V \text{ MAX} \geq 0.8$ RF ENVELOPE OUTPUT POINT	

Fig. C-8

9. Check the Tape Travel after Reassembling Deck Assembly.

9-1. Check Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment / Fixture	Specification	Test Equipment Connection Points	Test Conditions VCR(VCP) State
- Oscilloscope - Alignment tape (with 6H 3kHz Color Bar Signal) - Stop Watch	- RF Locking Time: Less than 5 sec. - Audio Locking Time: Less than 10 sec.	- CH-1: PB RF Envelope - CH-2: Audio Output - RF Envelope Output Point - Audio Output Jack	Play an alignment tape (with 6H 3kHz Color Bar Signal)
Checking Procedure Play an alignment tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.			
NOTES: - CUE is fast forward mode (FF) - REV is the rewind mode (REW) - Referenced to the Play mode			

MECHANISM ADJUSTMENT

9-2. Check the condition between the Audio and Video Sync. (Lip Sync.)

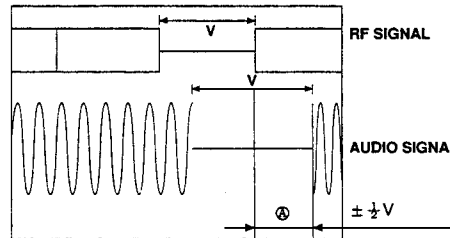
Test Equipment / Fixture	Specification	Test Equipment Connection Points	Test Conditions VCR(VCP) State
- Oscilloscope - Alignment Tape	Less than $\pm \frac{1}{2} V$	- CH-1: PB RF Envelope - CH-2: Audio Output - RF Envelope Output Point - Audio Output Jack	Play an alignment tape
Checking Procedure - Confirm that the period ④ in Fig. C-9-1 is within $\pm \frac{1}{2} V$. - If the result is abnormal, repeat adjustment #7. (X-Value adjustment) V ☐ NTSC: 16.67msec V ☐ PAL: 20msec 			

Fig. C-9-1

9-3. Check for tape curling or jamming

Test Equipment / Fixture	Specification	VCR(VCP) State
- T-160 Tape - T-120 Tape	Be sure there is no tape jamming or curling at the beginning, middle or end of a T-160 tape.	Run the CUE, REV play mode at the beginning and the end of the tape.
Checking Procedure - Confirm that the tape runs smoothly around the roller guides, drum and A/C head assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the beginning, middle and end sections of the cassette. - Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.		

MECHANISM ADJUSTMENT

10. Maintenance/Inspection Procedure

1) Required Maintenance

The recording density of a VCR(VCP) is much higher than that of an audio tape recorder. VCR(VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatibility with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

2) Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR (VCP), and the environment in which the VCR(VCP) is used. But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary Average hours used per day	About 1 year	About 18 months	About 3 years
One hour			
Two hours			
Three hours			

3) Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit. Check with the customer to find out how often the unit is used, and then determine that the unit is ready for inspection and maintenance. Check the following parts.

Tabel 2

Phenomenon	Inspection
Poor S/N, no color	Dirt on video head or worn video head
Tape does not run or tape is slack	Dirt on pinch roller, belt or flywheel belt
Vertical jitter, horizontal jitter	Dirt on video head or in tape transport system
Color beats	Dirt on full-erase head
Low volume or distorted audio	Dirt on audio/control head
No Fast forward or rewind or rotation is slow	Dirt on belt

4) Supplies Required for Inspection and Maintenance

- (1) Grease Kanto G-311G or equivalent
- (2) Isopropyl Alcohol or equivalent
- (3) Cleaning Patches

5) Maintenance Procedure

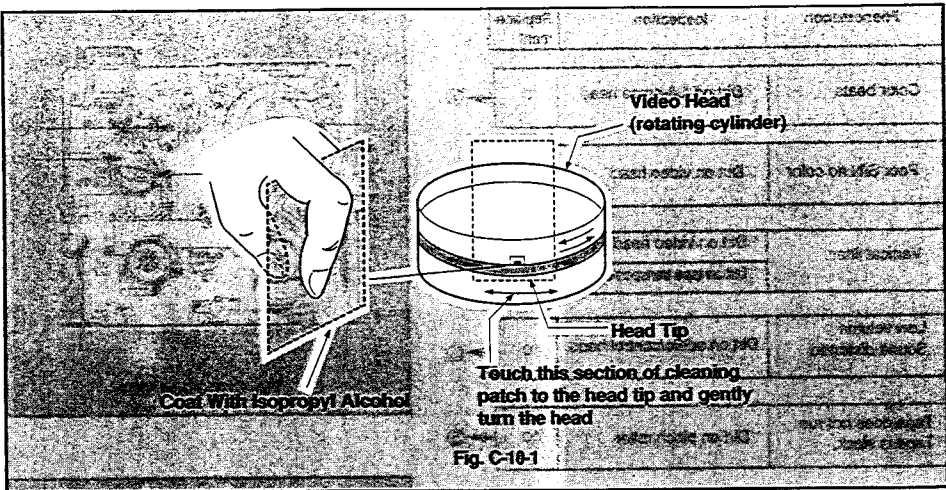
5-1) Cleaning

- (1) Cleaning video head
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left. (Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.) Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
- (2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isopropyl Alcohol.

NOTES:

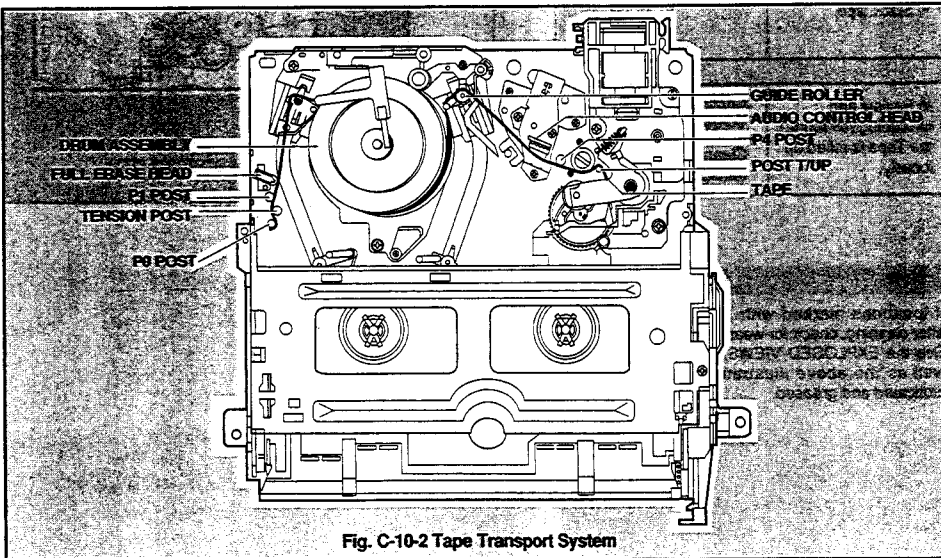
- ① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
- ② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no that force is that would cause deforming or damage applied to the system.

MECHANISM ADJUSTMENT



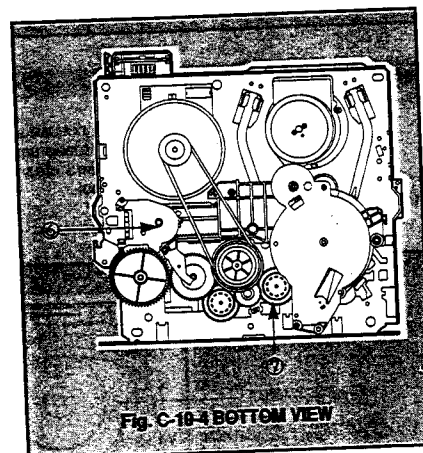
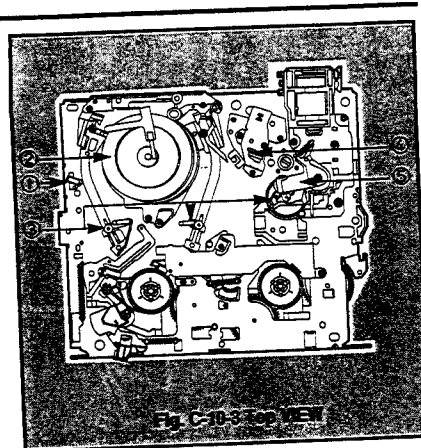
5-2) Greasing

- (1) Greasing guidelines
Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape transport or drive system. Wipe any excess and clean with cleaning patch wetted in Isopropyl Alcohol.
- (2) Periodic greasing
Grease specified locations every 5,000 hours.



MECHANISM ADJUSTMENT

Phenomenon	Inspection	Replace-ment	
Color beats	Dirt on full-erase head	○	➔ ①
Poor S/N no color	Dirt on video head	○	➔ ②
Vertical jitter	Dirt on video head	○	➔ ③
	Dirt on tape transport system		
Low volume Sound distorted	Dirt on audio/control head	○	➔ ④
Tape does not run. Tape is slack.	Dirt on pinch roller	○	➔ ⑤



Phenomenon	Inspection	Replace-ment	
- No fast forward or rewind, or rotation is slow - Tape does not run - Slack tape	Dirt on reel belt	○	➔ ⑥
In Review and Unloading (off mode), the Tape is rolled up loosely.	Clutch Ass'y S27 Torque reduced	○	➔ ⑦
	Cleaning Drum and transport system		

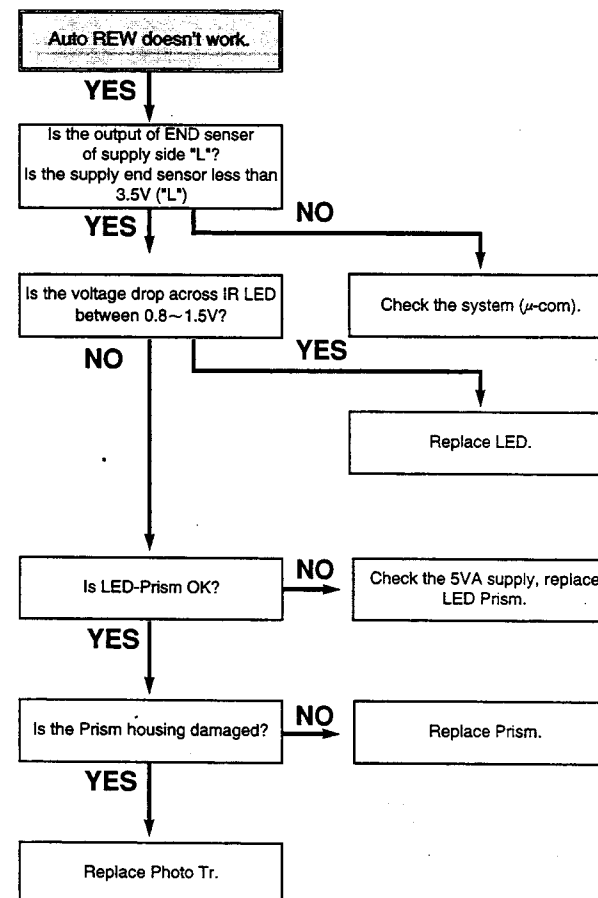
Note

If locations marked with ○ do not operate normally after cleaning, check for wear and replace.
See the EXPLODED VIEWS at the end of this manual as well as the above illustrations for the sections to be lubricated and greased.

MECHANISM TROUBLESHOOTING GUIDE

1. Deck Mechanism

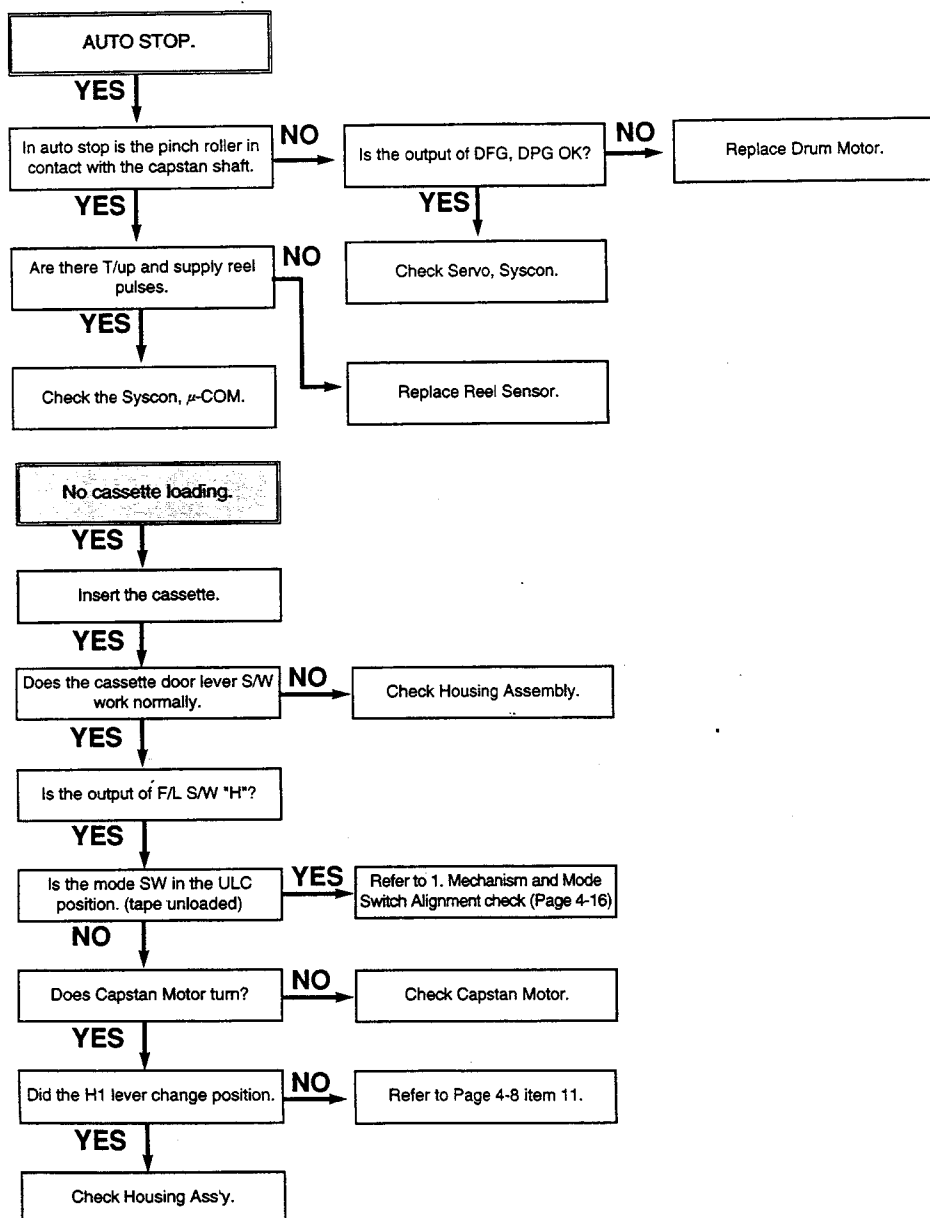
A.



NOTES:

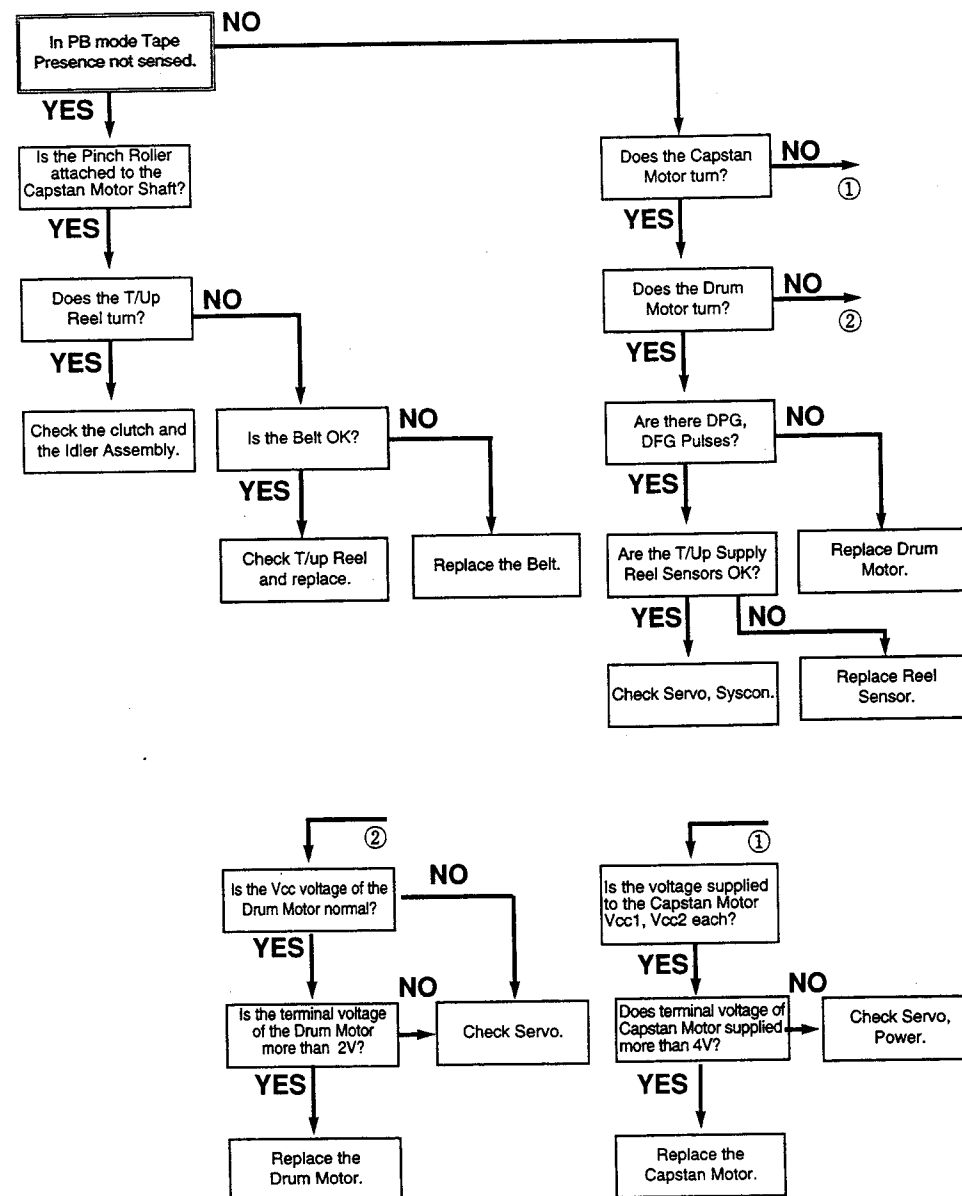
- 1) Auto REW takes place when the supply end sensor is "H" high.
- 2) "H"=voltage greater than 3.5V, "L"=voltage between 0.7~1.0V.

MECHANISM TROUBLESHOOTING GUIDE



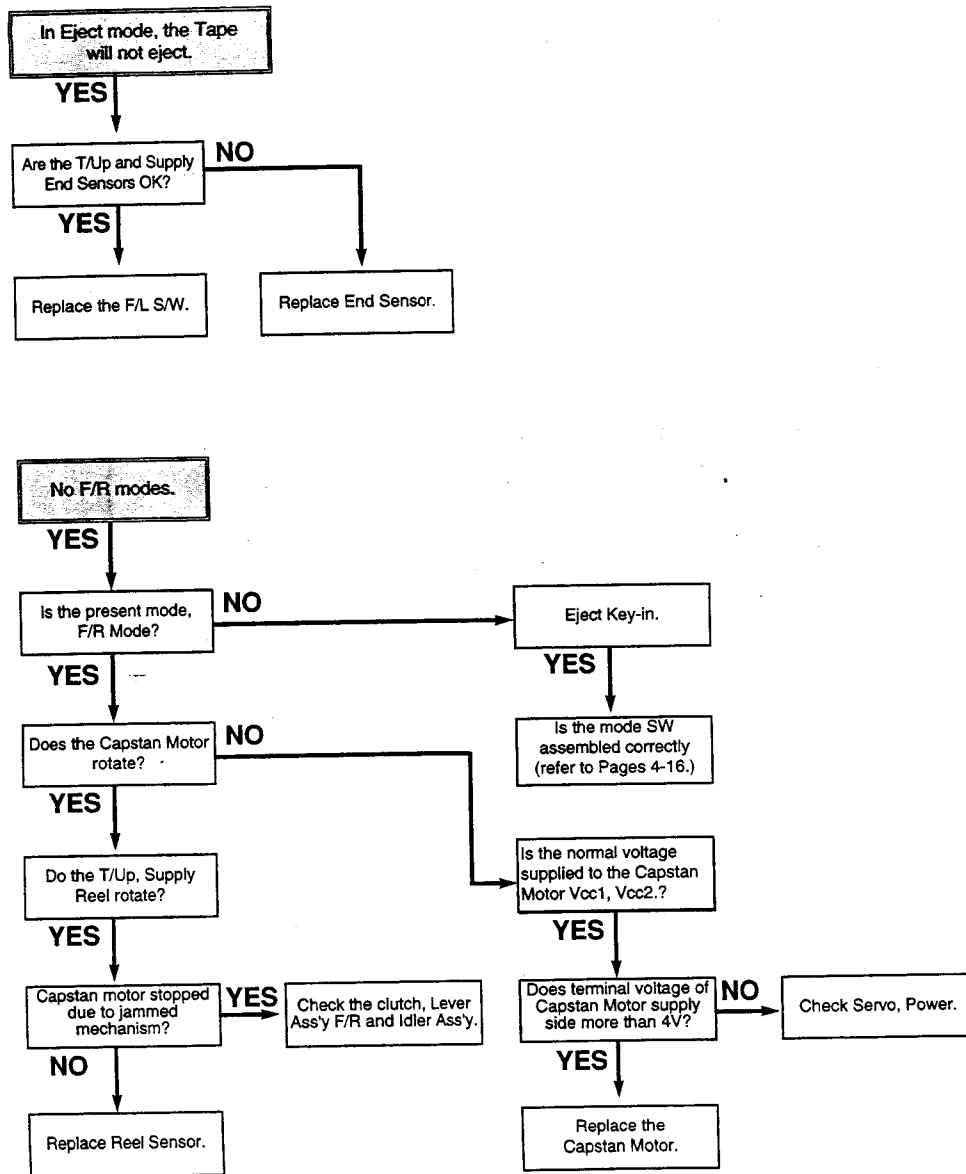
MECHANISM TROUBLESHOOTING GUIDE

D.



MECHANISM TROUBLESHOOTING GUIDE

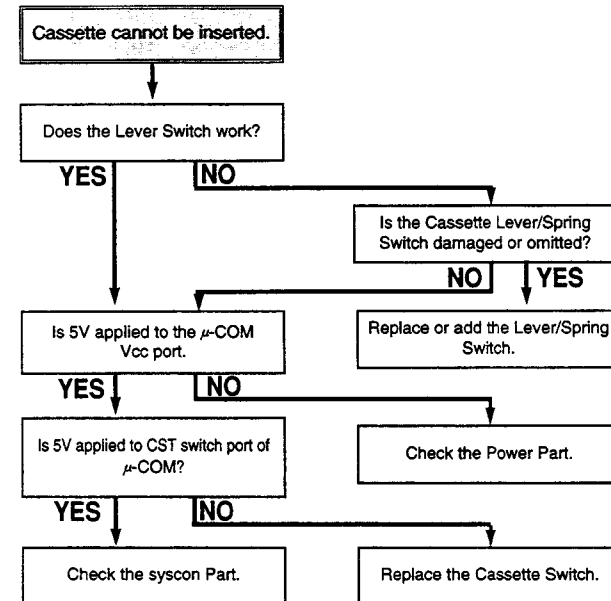
E.



MECHANISM TROUBLESHOOTING GUIDE

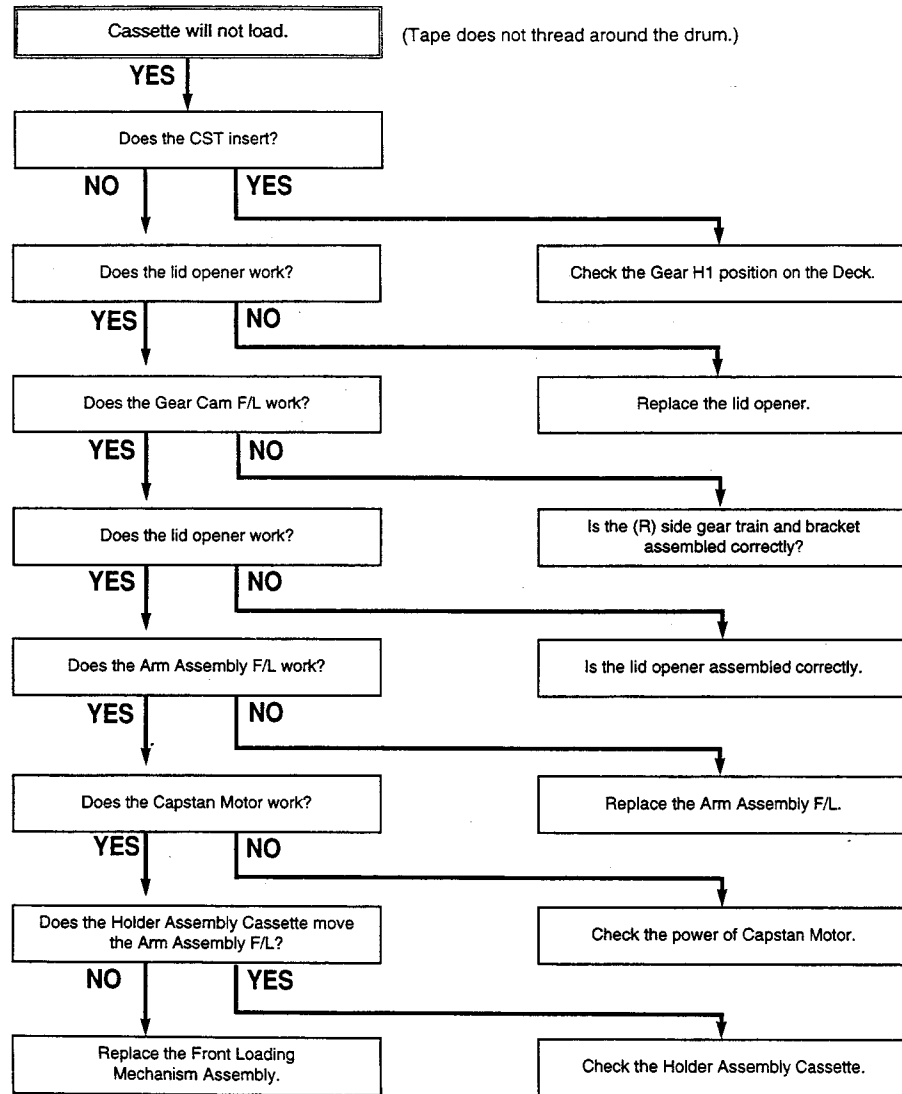
2. Front Loading Mechanism

A.



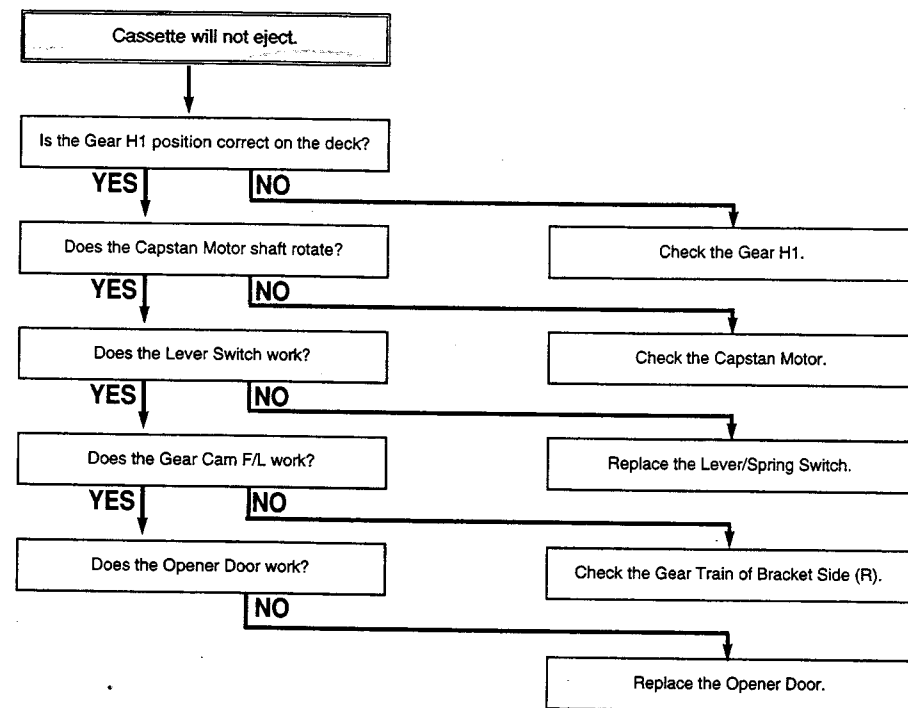
MECHANISM TROUBLESHOOTING GUIDE

B.



MECHANISM TROUBLESHOOTING GUIDE

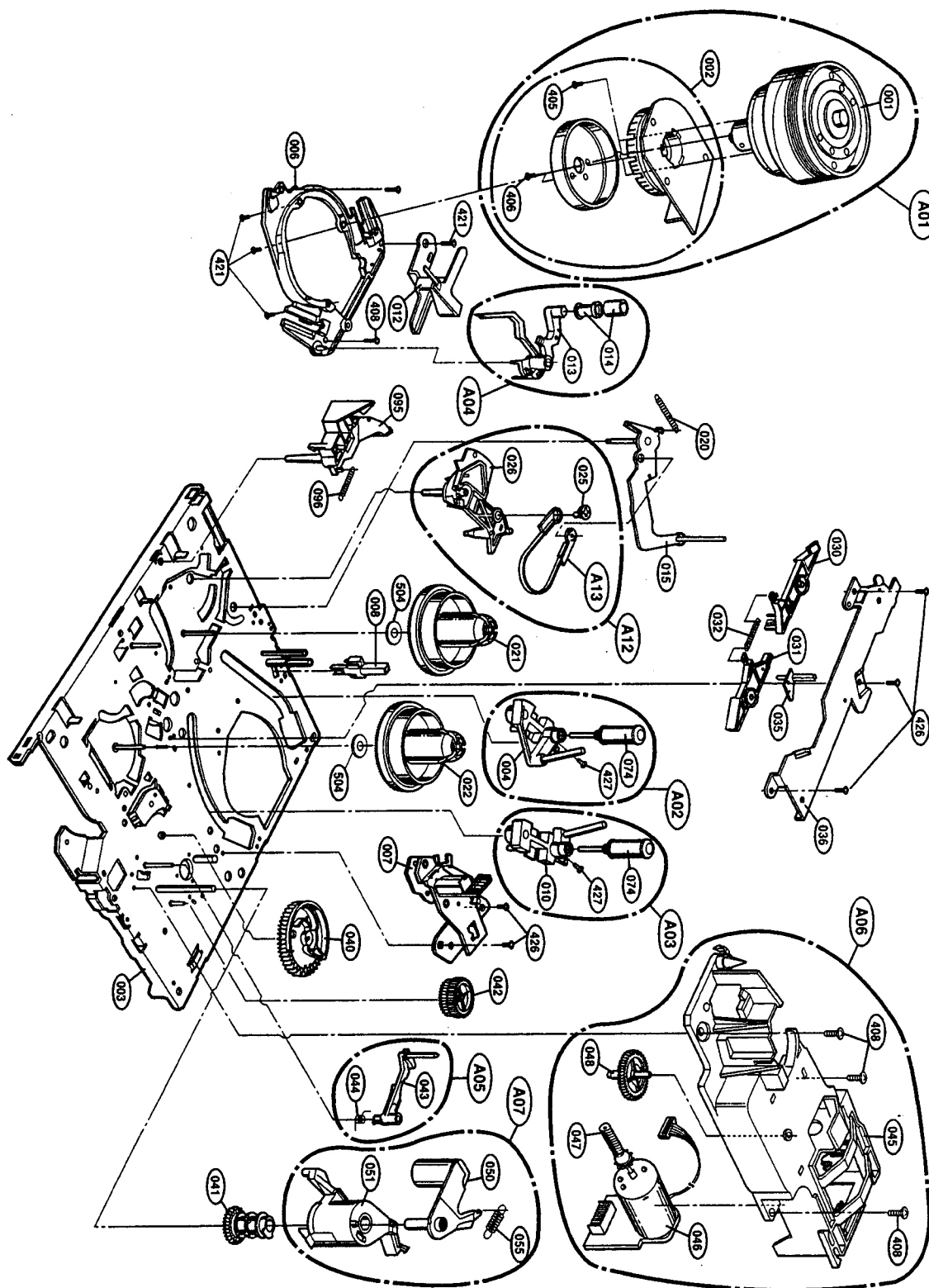
C.



EXPLODED VIEW

1. Moving Mechanism Section (1)

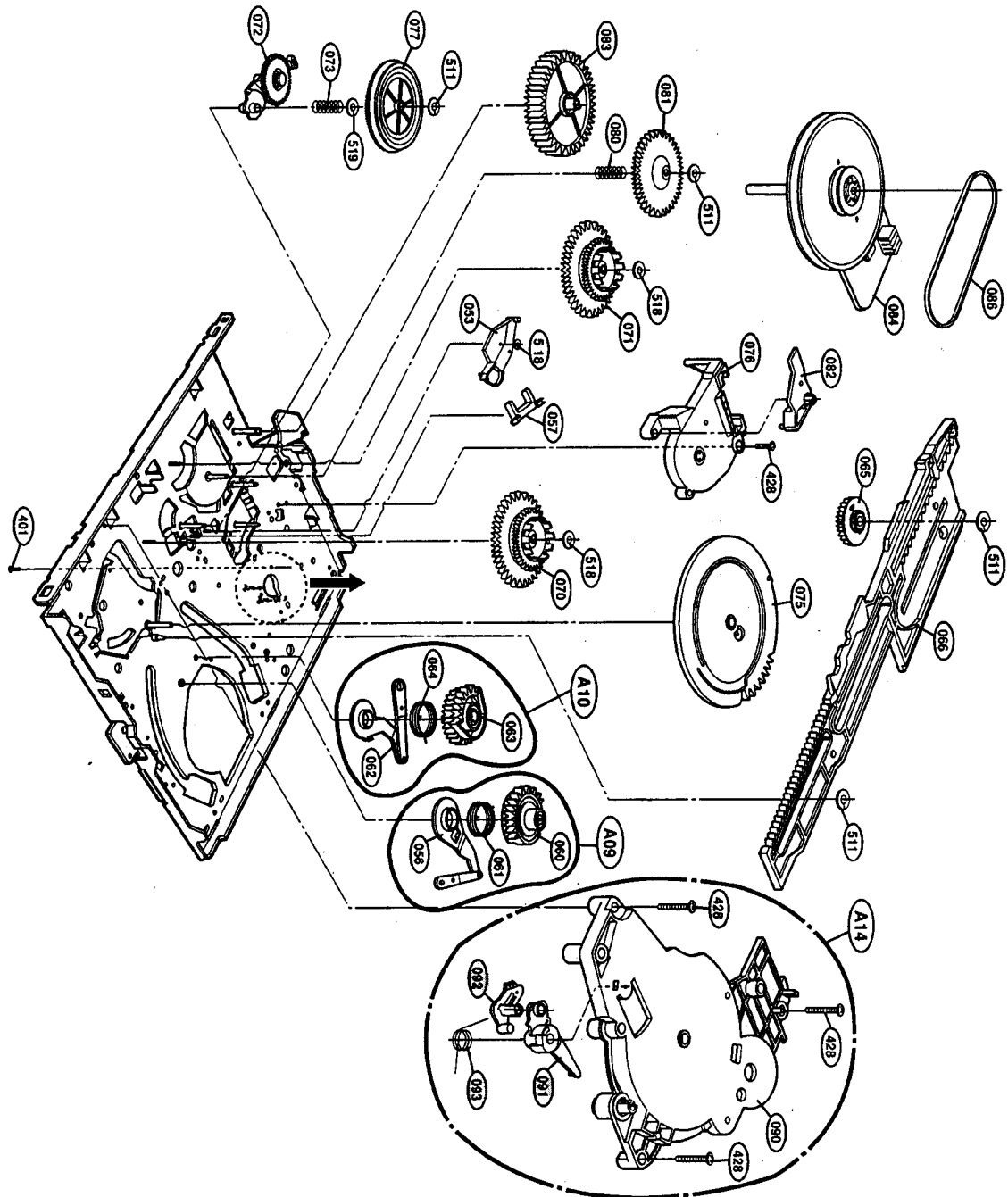
(Top View)



EXPLODED VIEW

2. Moving Mechanism Section (2)

(Bottom View)



NOTE) ○ is the additional parts of the VCR (Video Cassette Recorder) Models.

3. Front Loading Mechanism Section



SECTION 5 REPLACEMENT PARTS LIST

• Mechanical Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
ASSEMBLY PARTS SECTION						
	OR	A00	6721R-0050A	DECK ASSY	D-27U (P, 6HF, EP)	NSP
		A01	6723R-0027G	DRUM ASSY	(3P6S)SUPER PAL D4HD+HIFI (11)	
		A02	225-361A	BASE	ASSY P2	
		A03	225-364A	BASE	ASSY P3	
		A04	386-394A	ARM	ASSY CLEANER	
		A05	386-405B	ARM	ASSY T/UP	
		A06	4811R-0004G	BRACKET ASSY	L/D MOTOR (D27U/AMWA)	
		A07	340-070A	HOLDER	ASSY PINCH	
		A07	340-195A	HOLDER	ASSY PINCH	
		A09	435-435A	GEAR	ASSY P2	
		A10	435-437A	GEAR	ASSY P3	
		A12	333-329A	LEVER	ASSY TENSION	
		A13	328-075A	BAND	ASSY TENSION	
		A14	4811R-0010B	BRACKET ASSY	CAM	
		A20	3661R-0001B	HOUSING ASSY (MECH)	D-27	
		A21	4931R-0004A	HOLDER ASSY	CST	
		A22	4811R-0002A	BRACKET ASSY	SIDE(R)	
PARTS SECTION						
	OR	001	6723R-0026G	DRUM ASSY	SUB(SUPER PAL D4HD+HIFI-11P)	NSP
		002	414-209B	MOTOR	ASSY DRUM GVD-027B ALPS	
		002	414-217B	MOTOR	ASSY DRUM E20XL20 D27 SANKYO	
		003	311-011A	CHASSIS ASSY	D27	NSP
		004	225-362A	BASE	SUB ASSY P2	
		006	225-376A	BASE	ASSY DRUM	
		007	225-371A	BASE	ASSY A/C	NSP
		008	523-833A	HEAD	FE HVFHU0010AK ALPS	
		009	434-244A	ROLLER	ASSY INERTIA	
		010	225-365A	BASE	SUB ASSY P3	NSP
		012	225-399A	BASE	ASSY BRUSH	
		013	386-395A	ARM	CLEANER	
		014	324-835B	HOLDER	ASSY CLEANER	NSP
		015	386-392A	ARM	ASSY TENSION	
		020	442-640A	SPRING	TENSION	
		021	456-070A	REEL	S27	NSP
		022	456-071A	REEL	T27	
		025	340-008A	HOLDER	BAND(C)	
		026	333-330A	LEVER	TENSION	NSP
		030	4421R-0002A	BRAKE ASSY	SUPPLY (U)	
		031	338-114B	BRAKE ASSY	T/UP (U)	
		032	442-655A	SPRING	MB	NSP
		035	316-019A	BODY	PRISM LED	
		036	257-071A	PLATE	UP	
		040	435-441A	GEAR	PINCH CAM	NSP
		041	435-440A	GEAR	PINCH	
		042	435-439A	GEAR	CNT	
		043	386-404B	ARM	SUB ASSY T/UP	NSP
		044	442-650A	SPRING	T/UP	

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		045	321-669A	BRACKET	L/D MOTOR	
		046	414-199G	MOTOR(MECH)	ASSY L/D(AIWA)	
		047	4422R-0001A	WORM	L/D MOTOR	
		048	437-020A	WORM	WHEEL	
		050	4261R-0002A	ARM ASSY!	PINCH (D/C)	
		051	340-073A	HOLDER	SUB ASSY PINCH	
		053	4510R-0010A	LEVER	F/R (U)	NSP
		055	442-649A	SPRING	PINCH	NSP
		056	333-334A	LEVER	ASSY P2	
		057	4260R-0007A	ARM	F/R	
		060	435-436A	GEAR	P2	NSP
		061	442-647A	SPRING	P2	NSP
		062	333-336A	LEVER	ASSY P3	NSP
		063	435-438A	GEAR	P3	NSP
		064	442-648A	SPRING	P3	NSP
		065	435-442A	GEAR	P/S	
		066	3300R-0123A	PLATE	SLIDER(U)	
		070	337-007B	CLUTCH	ASSY S27	
		071	337-008A	CLUTCH	ASSY T27	
		072	386-396A	ARM	ASSY IDLER	
		073	442-644A	SPRING	UP/D	
		074	434-173A	ROLLER	ASSY GUIDE	
		074	434-173C	ROLLER	ASSY GUIDE	
		074	434-173D	ROLLER	ASSY GUIDE(DAI YANG)	
		075	435-433A	GEAR	CAM L/D	
		076	556-252B	SWITCH	MODE S/W(D-27),HMW0840-01,HOSI	
		077	435-432C	GEAR	PULLEY	
		080	442-656A	SPRING	H1	
		081	435-443A	GEAR	H1	
		082	333-339A	LEVER	H1	
		083	435-444A	GEAR	H-2	
		084	4680RA0001C	MOTOR(MECH)	GVC-027UA CAPSTAN LGEC	
		086	452-062A	BELT	CAPSTAN D74.6XT2.1	
		090	4810R-0043A	BRACKET	CAM (B/T)	
		091	4510R-0008A	LEVER	JOG (W/O SPRING)	
		092	435-434A	GEAR	JOG	
		093	442-646A	SPRING	JOG	
		095	333-338A	LEVER	TAB	
		096	442-652A	SPRING	TAB	
		100	3300R-0032A	PLATE	TOP	
		101	386-407A	ARM	ASSY F/L	NSP
		102	4930R-0013A	HOLDER	CST	NSP
		103	4930R-0012A	HOLDER	BRACKET(R)	NSP
		104	4510R-0002A	LEVER	STOPPER(R)	NSP
		105	4930R-0011A	HOLDER	BRACKET(L)	NSP
		106	4510R-0001A	LEVER	STOPPER(L)	NSP
		107	4810R-0005A	BRACKET	SIDE(L)	NSP
		111	442-659A	SPRING	STOPPER	NSP
		112	442-660A	SPRING	RELEASE	NSP
		113	4810R-0006A	BRACKET	SIDE(R)	NSP
		114	435-467A	GEAR	CAM F/L	NSP
		115	435-468A	GEAR	CONNECT	NSP
		120	333-342A	LEVER	SWITCH	NSP
		121	442-661A	SPRING	SWITCH	NSP
		122	3300R-0006A	PLATE	COVER	NSP

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		123	4974R-0006A	GUIDE	CST	
		126	465-040A	OPENER	DOOR	NSP
		130	257-075A	PLATE	GROUND	NSP
		131	257-106A	PLATE	REFLECTOR	NSP
		132	3300R-0033A	PLATE	GROUND(L)	NSP
SCREW						
		401	1MPK0261718	SCREW MACHINE, PAN HEAD	+ , D2.6 L5.0 MSWR3/FZY	
		405	1MDC0262818	PAN HEAD MACHINE SCREW P/WASH+	D2.6 L12 MSWR3/FZY	
		406	1MEC0302018	PAN HEAD MACHINE SCREW S/W +	D 3.0 L 6.0 MSWR3/FZY	
		408	1MBC0302418	BINDING HEAD MACHINE SCREW +	D 3.0 L 8.0 MSWR3/FZY	
		411	353-046B	SCREW	SPECIAL (3X8 FZMY)	
		421	1MPC0302618	PAN HEAD MACHINE SCREW +!	D3.0 L10.0,MSWR3/FZY	
		426	1MPC0302018	PAN HEAD MACHINE SCREW +!	D 3.0 L 6.0 MSWR3/FZY	
		427	353-054B	SCREW	MINIATURE	
		428	353-221A	SCREW	M3-L15	
		429	353-046A	SCREW	SPECIAL (3X6 FZMY)	
NUT, WASHER						
		504	354-001B	WASHER	P.S D3.1XD6X0.5T	
		511	354-080C	WASHER	STOPPER	
		518	354-128A	WASHER	STOPPER	
		519	354-128B	WASHER	STOPPER	

• Cabinet & Main Frame Section

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
ASSEMBLY PARTS SECTION						
		A41	3501R-1062A	BOARD ASSY	KEY BOARD	
		A42	3501R-1061F	BOARD ASSY	TIMER	
		A43	3721R-F024K	PANEL ASSY,FRONT[NORMAL PARTS]	S909LP 3GL1L	
		A44	3501R-1064A	BOARD ASSY	PRE-AMP	
		A45	3501R-1063A	BOARD ASSY	SMPS	
		A46	3501R-1067E	BOARD ASSY	MAIN(S909LP)	
		A47	6871R-1059B	PWB(PCB) ASSY	Y/CBOARD	
		A49	6871R-1060A	PWB(PCB) ASSY	MPX BOARD	
PARTS SECTION						
		250	3110R-0030A	CASE	TOP	
		260	3210R-0009B	FRAME	MAIN	NSP
		261	4930R-0023A	HOLDER	TUNER	
		262	4940R-V003A	KNOB	VOLUME	
		263	4940R-Z004B	KNOB	SHUTTLE(UVP-H396G)	
		264	4940R-Z003B	KNOB	JOG(UVP-H396G)	
		275	4930R-0024A	HOLDER	DIGITRON	
		280	3720R-F020B	PANEL	FRONT	NSP
		281	3551R-0007H	COVER ASSY	DOOR	NSP
		283	3580R-0022T	DOOR	CST	

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		284	442-681A	SPRING	DOOR	
		300	6410RCL002B	POWER CORD	DW5000E(FILTER) DONGWON VDE 21	
		320	3721R-D015D	PANEL ASSY,DISTRIBUTOR NORMAL		
		330	3550R-0159A	COVER	BOTTOM	
SCREW						
		452	353-051A	SCREW	SPECIAL	
		462	353-136A	SCREW	SPECIAL(FBK) (353S353A)	
		463	1MBC0302418	BINDING HEAD MACHINE SCREW +	D 3.0 L 8.0 MSWR3/FZY	
		472	353-051E	SCREW	SPECIAL (3X12)	

• Packing Accessory Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		801	3835RP0031H	INSTRUCTION ASSY	S909LP 3GL1L	
		802	3890R-H125A	BOX	S909LP 3GL1L SW3-A 1.095 2 FLX	
		803	3920R-0063A	PACKING	0.02 107 EPS 10 768 1596	
		804	292-053B	BAG	SOFT(MIDI)	NSP
		804	3858R-0006A	SHEET	ROLL(W630XL300MX0.5T)	NSP
		806	861-033B	CABLE SET ASSY	RF-CABLE ASSY FTZ (D.D)	
		808	534-008C	BATTERY	AAAM(R03) 1.5V 1PAIR(LOCAL)	
		810	861-505K	CABLE SET ASSY	RF-CABLE ASSY PAL HI-FI FTZ	
		811	564-017B	PLUG ASSY	PHONO CORD 1WAY (YL)	
		812	564-018B	PLUG ASSY	PHONO CORD 2WAY (RD/WH)	
		813	683-002B	CABLE	S-VHS CORD SUAHN	
		821	861-045C	CABLE,COAXIAL	SCART+SCART CABLE (DONGDO)	
		825	453-100K	TAPE (CIRC)	S-VHS TAPE(PAL E-180)	

• Remote Control Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		900	6711R2P004A	REMOTE CONTROLLER ASSY	J4	

• Electrical Section

RUN DATE : 98.11.19

CAUTION: The * marks in the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the SAFETY PRECAUTIONS and SERVICING PRECAUTIONS in the manual. Do not degrade the safety of the unit through improper servicing.

Tolerance

Symbol	C	J	K	M	N	Z	P	A
%	±2	±5	±10	±20	±30	+80 -20	+100 -10	+100 -10

CC, CJ, CK: Capacitor, Ceramic
CE: Capacitor, Electrolytic
CO: Capacitor, Polyester

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
CAPACITOR				
		C001	0CN1030F678	0.01M 16V M Y TA26
		C002	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C003	0CN1030F678	0.01M 16V M Y TA26
		C004	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C005	0CN1030F678	0.01M 16V M Y TA26
		C006	0CN1040K948	0.1UF 50V Z F TA26 D
		C007	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C008	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C009	0CN1030F678	0.01M 16V M Y TA26
		C010	0CN6810K518	680P 50V K B TA26
		C011	0CN6810K518	680P 50V K B TA26
		C012	0CN1030F678	0.01M 16V M Y TA26
		C013	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C014	0CN1030F678	0.01M 16V M Y TA26
		C015	0CN3310K518	330P 50V K B TA26
		C016	0CN1030F678	0.01M 16V M Y TA26
		C101	0CQ4732K409	0.047UF S 50V J PE TP
		C102	0CQ4732K409	0.047UF S 50V J PE TP
		C103	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C104	0CN1030F678	0.01M 16V M Y TA26
		C105	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C106	0CK1030K945	0.01UF 50V Z F TR
		C151	0CN1010K518	100P 50V K B TA26
		C152	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C153	0CN1030F678	0.01M 16V M Y TA26
		C154	0CE1054K638	1.0U SRA 50V M FM5 BP TP(D)
		C155	0CQ6822K409	6800PF S 50V J PE TP
		C156	0CN2230H948	0.022M 25V Z F TA26
		C157	0CC3300K415	33P 50V J NPO TP
		C158	0CC2200K415	22P 50V J NPO TS
		C159	0CE1044K638	0.1M SRA 50V M FM5 TP(5)
		C160	0CN15610K518	560P 50V K B TA26
		C161	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C162	0CN1030F678	0.01M 16V M Y TA26
		C163	0CX1200K408	12P 50V J SL TA26
		C164	0CX1000K408	10P 50V J SL TA26
		C165	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C166	0CN1010K518	100P 50V K B TA26
		C167	0CN1030F678	0.01M 16V M Y TA26
		C168	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C169	0CN1040K948	0.1UF 50V Z F TA26 D
		C170	0CN1040K948	0.1UF 50V Z F TA26 D
		C171	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		C172	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C174	0CN1030F678	0.01M 16V M Y TA26
		C175	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C176	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C180	0CX5600K408	56P 50V J SL TA26
		C181	0CN1020K518	1000P 50V K B TA26
		C182	0CX1200K408	12P 50V J SL TA26
		C183	0CX2700K408	27P 50V J SL TA26
		C184	0CX4700K408	47P 50V J SL TA26
		C201	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C202	0CN1030F678	0.01M 16V M Y TA26
		C206	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C207	0CN1030F678	0.01M 16V M Y TA26
		C208	0CE1064K638	10M SRA 50V M FM5 TP(5)
		C209	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C210	0CN2230H948	0.022M 25V Z F TA26
		C213	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C214	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C215	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C216	0CN1030F678	0.01M 16V M Y TA26
		C217	0CE4753K638	4.7M SRE 50V M FM5 TP(5)
		C218	0CN1030F678	0.01M 16V M Y TA26
		C219	0CN1510K518	150P 50V K B TA26
		C221	0CN1020K518	1000P 50V K B TA26
		C222	0CN1020K518	1000P 50V K B TA26
		C223	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C224	0CN1040K948	0.1UF 50V Z F TA26 D
		C301	0CH4101K416	100P 50V J NPO 2.0*1.25 R/TP
		C302	0CH4101K416	100P 50V J NPO 2.0*1.25 R/TP
		C303	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C304	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C305	0CH1123K516	0.0120UF 50V K B(5YP) 2012 R/T
		C306	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C307	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C308	0CH1104K946	0.1UF 50V Z YSV(F) 2012 R/TP
		C309	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C310	0CH1104K946	0.1UF 50V Z YSV(F) 2012 R/TP
		C312	0CH4360K416	36PF 50V J NPO 2012 R/TP
		C313	0CE1044K638	0.1M SRA 50V M FM5 TP(5)
		C314	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C315	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C316	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C317	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C319	0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP
		C320	0CE2254K638	2.2M SRA 50V M FM5 TP(5)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
C321		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C322		0CE4744K638	0.47M SRA 50V M FM5 TP(5)	
C323		0CE2264F638	22M SRA 16V M FM5 TP(5)	
C324		0CE2254K638	2.2M SRA 50V M FM5 TP(5)	
C325		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C326		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C327		0CE2264F638	22M SRA 16V M FM5 TP(5)	
C328		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C329		0CH1473K516	0.047U 50V K X7R 2.0X1.2 R/TP	
C330		0CE1064F638	10M SRA 16V M FM5 TP(5)	
C331		0CE1064F638	10M SRA 16V M FM5 TP(5)	
C332		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C333		0CE4744K638	0.47M SRA 50V M FM5 TP(5)	
C334		0CE3344K638	0.33M SRA 50V M FM5 TP(5)	
C335		0CE4744K638	0.47M SRA 50V M FM5 TP(5)	
C336		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C337		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C338		0CH4120K416	12P 50V NPO 2.0X1.25 R/TP	
C339		0CE1044K638	0.1M SRA 50V M FM5 TP(5)	
C340		0CH4331K416	330P 50V J NPO 2.0X1.2 R/TP	
C341		0CH4121K416	120P 50V J NPO 2.0X1.2 R/TP	
C342		0CH4270K416	27P 50V J COG 2.0X1.2 R/TP	
C343		0CH4150K416	15P 50V J COG 2.0X1.2 R/TP	
C344		0CH4121K416	120P 50V J NPO 2.0X1.2 R/TP	
C345		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C346		0CH4100K416	10PF 50V J NPO 2012 R/TP	
C347		0CH4151K416	150P 50V J NPO 2.0X1.2 R/TP	
C348		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C349		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C350		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C351		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C352		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C353		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C354		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C355		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C356		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C357		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C358		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C359		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C360		0CE2274C638	220M SRA 6.3V M FM5 TP(5)	
C361		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C362		0CE1064F638	10M SRA 16V M FM5 TP(5)	
C363		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C364		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C365		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C366		0CH4331K416	330P 50V J NPO 2.0X1.2 R/TP	
C367		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C368		0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP	
C369		0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP	
C370		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C371		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C372		0CE1054K638	1.0M SRA/SS 50V M FM5 TP(5)	
C373		0CE1064F638	10M SRA 16V M FM5 TP(5)	
C374		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C375		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C376		0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP	
C377		0CH4101K416	100P 50V J NPO 2.0X1.25 R/TP	
C378		0CH4680K416	68P 50V J COG 2.0X1.2 R/TP	
C379		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C380		0CH4270K416	27P 50V J COG 2.0X1.2 R/TP	
C381		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C382		0CH4180K416	18P 50V J C 2.0X1.2 R/TP	

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
C383		0CH4180K416	18P 50V J C 2.0X1.2 R/TP	
C384		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C385		0CH4101K416	100P 50V J NPO 2.0X1.25 R/TP	
C386		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C387		0CH4390K416	39P 50V J COG 2.0X1.2 R/TP	
C388		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C389		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C390		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C391		0CH4220K416	22P 50V J NPO 2.0X1.25 R/TP	
C392		0CH4150K416	15P 50V J COG 2.0X1.2 R/TP	
C393		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C394		0CH4680K416	68P 50V J COG 2.0X1.2 R/TP	
C395		0CH4150K416	15P 50V J COG 2.0X1.2 R/TP	
C396		0CH4150K416	15P 50V J COG 2.0X1.2 R/TP	
C397		0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP	
C398		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C399		0CH4820K416	82P 50V J COG 2.0X1.2 R/TP	
C3A1		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C3A2		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C3A3		0CH1473K516	0.047U 50V K X7R 2.0X1.2 R/TP	
C3A4		0CH4560K416	56P 50V J NPO 2.0X1.25 R/TP	
C3A5		0CH4101K416	100P 50V J NPO 2.0X1.25 R/TP	
C3A6		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C3A7		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C3A8		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C3A9		0CE4754K638	4.7M SRA 50V M FM5 TP(5)	
C3B1		0CE2254K638	2.2M SRA 50V M FM5 TP(5)	
C3B2		0CE2254K638	2.2M SRA 50V M FM5 TP(5)	
C3B3		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C3B4		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C3B5		0CH4271K416	270P 50V J COG 2.0X1.2 R/TP	
C3B6		0CH4270K416	27P 50V J COG 2.0X1.2 R/TP	
C3B7		0CH4270K416	27P 50V J COG 2.0X1.2 R/TP	
C3B8		0CH4271K416	270P 50V J COG 2.0X1.2 R/TP	
C3B9		0CH4221K416	220P 50V J C 2.0X1.25 R/TP	
C3C1		0CH4820K416	82P 50V J COG 2.0X1.2 R/TP	
C3C2		0CH4271K416	270P 50V J COG 2.0X1.2 R/TP	
C3C3		0CH4101K416	100P 50V J NPO 2.0X1.25 R/TP	
C3C4		0CH4181K416	180P 50V J NPO 2.0X1.25 R/TP	
C3C5		0CH4271K416	270P 50V J COG 2.0X1.2 R/TP	
C3C6		0CH4270K416	27P 50V J COG 2.0X1.2 R/TP	
C3C7		0CH4271K416	270P 50V J COG 2.0X1.2 R/TP	
C3C8		0CH4101K416	100P 50V J NPO 2.0X1.25 R/TP	
C3C9		0CH4270K416	27P 50V J COG 2.0X1.2 R/TP	
C3D1		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C3D2		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C3D3		0CE1064F638	10M SRA 16V M FM5 TP(5)	
C3D4		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C3D5		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C3D6		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C3D7		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C3D8		0CE1064F638	10M SRA 16V M FM5 TP(5)	
C3D9		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C401		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C402		0CH4080K116	8P 50V NPO 2.0X1.25 R/TP	
C403		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C404		0CE1074F638	100U SRA 16V M FM5 TP(5)	
C405		0CH4102K406	1000P 50V J SL 2.0X1.2 R/TP	
C406		0CE4754K638	4.7M SRA 50V M FM5 TP(5)	
C407		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C408		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C409		0CH4050K016	5P 50V C COG 2.0X1.2 R/TP	

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C410		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C411		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C412		0CE2274C638	220M SRA 6.3V M FM5 TP(5)	
C413		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C414		0CE2274C638	220M SRA 6.3V M FM5 TP(5)	
C415		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C416		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C417		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C418		0CE1054K638	1.0M SRA/SS 50V M FM5 TP(5)	
C419		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C420		0CH4080K116	8P 50V NPO 2.0X1.25 R/TP	
C421		0CH4100K416	10PF 50V J NPO 2012 R/TP	
C422		0CH4390K416	39P 50V J COG 2.0X1.2 R/TP	
C423		0CH4430K416	43PF 50V J NPO 2012 R/TP	
C424		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C425		0CH4100K416	10PF 50V J NPO 2012 R/TP	
C426		0CH4080K116	8P 50V NPO 2.0X1.25 R/TP	
C427		0CH4390K416	39P 50V J COG 2.0X1.2 R/TP	
C428		0CE4744K638	0.47M SRA 50V M FM5 TP(5)	
C429		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C430		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C431		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C432		0CH4080K116	8P 50V NPO 2.0X1.25 R/TP	
C433		0CH4100K416	10PF 50V J NPO 2012 R/TP	
C434		0CH4390K416	39P 50V J COG 2.0X1.2 R/TP	
C435		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C436		0CE4744K638	0.47M SRA 50V M FM5 TP(5)	
C437		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C438		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C439		0CE4744K638	0.47M SRA 50V M FM5 TP(5)	
C440		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C441		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C442		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C443		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C444		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C445		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C447		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C448		0CE3354K638	3.3M SRA 50V M FM5 TP(5)	
C449		0CH4120K416	12P 50V NPO 2.0X1.25 R/TP	
C450		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C451		0CH4060K116	6PF 50V NPO 2012 R/TP	
C452		0CH4100K416	10PF 50V J NPO 2012 R/TP	
C453		0CE1044K638	0.1M SRA 50V M FM5 TP(5)	
C454		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C459		0CE4764F638	47M SRA/SS 16V M FM5 TP(5)	
C460		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C461		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C462		0CH4100K416	10PF 50V J NPO 2012 R/TP	
C463		0CH4060K116	6PF 50V NPO 2012 R/TP	
C464		0CH4330K416	33P 50V J C 2.0X1.2 R/TP	
C465		0CH4120K416	12P 50V NPO 2.0X1.25 R/TP	
C466		0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP	
C467		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C468		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C469		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C470		0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP	
C472		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C473		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C474		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C475		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C476		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	
C477		0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP	

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		C478	0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP
		C479	0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP
		C480	0CH4470K416	47P 50V J NPO 2.0X1.25 R/TP
		C484	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C485	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C487	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C490	0CH4180K416	18P 50V J C 2.0X1.2 R/TP
		C501	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C502	0CN1040K948	0.1UF 50V Z F TA26 D
		C503	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C504	0CN2230H948	0.022M 25V Z F TA26
		C505	0CN5610K518	560P 50V K B TA26
		C506	0CN2230H948	0.022M 25V Z F TA26
		C507	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C508	0CN1030F678	0.01M 16V M Y TA26
		C509	0CN1030F678	0.01M 16V M Y TA26
		C510	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C511	0CN1040K948	0.1UF 50V Z F TA26 D
		C512	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C513	0CE4764H638	47M SRA 25V M FM5 TP(5)
		C514	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C515	0CK1030K945	0.01UF 50V Z F TR
		C516	0CK1040K945	0.1M 50V Z F TS
		C517	0CK2230K945	0.022M 50V Z F TS
		C521	0CN1030F678	0.01M 16V M Y TA26
		C522	0CN1030F678	0.01M 16V M Y TA26
		C524	0CN2230H948	0.022M 25V Z F TA26
		C525	0CN1810K518	180P 50V K B TA26
		C526	0CN2230H948	0.022M 25V Z F TA26
		C527	0CE3364F638	33M SRA 16V M FM5 TP(5)
		C528	0CN1220F668	1200P 16V M X TA26
		C529	0CN6810K518	680P 50V K B TA26
		C530	0CC1800K415	18P 50V J NPO TS
		C531	0CC1800K415	18P 50V J NPO TS
		C532	0CC1500K415	15P 50V J NPO TS
		C533	0CC1500K415	15P 50V J NPO TS
		C534	0CN2230H948	0.022M 25V Z F TA26
		C535	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C536	0CN1040K948	0.1UF 50V Z F TA26 D
		C537	0CN1030F678	0.01M 16V M Y TA26
		C539	0CN1030F678	0.01M 16V M Y TA26
		C541	0CN1040K948	0.1UF 50V Z F TA26 D
		C548	0CK1020K515	1000P 50V K B TS
		C551	0CN1020K518	1000P 50V K B TA26
		C552	0CN2230H948	0.022M 25V Z F TA26
		C553	0CN1020K518	1000P 50V K B TA26
		C555	0CN2720F668	2700P 16V M X TA26
		C556	0CE4763F638	470M SRE 16V M FM5 TP(5)
		C557	0CN1020K518	1000P 50V K B TA26
		C559	0CN1020K518	1000P 50V K B TA26
		C567	0CN1030F678	0.01M 16V M Y TA26
		C568	0CN1030F678	0.01M 16V M Y TA26
		C569	0CQ4732K409	0.047UF S 50V J PE TP
		C570	0CQ3332K409	0.033UF S 50V J PE TP
		C572	0CN1040K948	0.1UF 50V Z F TA26 D
		C580	0CN1030F678	0.01M 16V M Y TA26
		C601	0CN1040K948	0.1UF 50V Z F TA26 D
		C602	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C603	0CX1000K408	10P 50V J SL TA26
		C604	0CX1000K408	10P 50V J SL TA26
		C605	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C606	0CN1040K948	0.1UF 50V Z F TA26 D

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		C607	0CN1040K948	0.1UF 50V Z F TA26 D
		C608	0CX1000K408	10P 50V J SL TA26
		C609	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C610	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C611	0CX1000K408	10P 50V J SL TA26
		C612	0CN1040K948	0.1UF 50V Z F TA26 D
		C613	0CN1040K948	0.1UF 50V Z F TA26 D
		C614	0CN1040K948	0.1UF 50V Z F TA26 D
		C615	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C616	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C617	0CN3910K518	390P 50V K B TA26
		C618	0CN1030F678	0.01M 16V M Y TA26
		C619	0CN1030F678	0.01M 16V M Y TA26
		C620	0CE3344K638	0.33M SRA 50V M FM5 TP(5)
		C621	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C622	0CN2230H948	0.022M 25V Z F TA26
		C623	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C624	0CN2230H948	0.022M 25V Z F TA26
		C625	0CN1030F678	0.01M 16V M Y TA26
		C626	0CN1220F668	1200P 16V M X TA26
		C627	0CN1010K518	100P 50V K B TA26
		C628	0CN3310K518	330P 50V K B TA26
		C629	0CN1030F678	0.01M 16V M Y TA26
		C630	0CX6900K408	68P 50V J SL TA26
		C631	0CX1800K408	18P 50V J SL TA26
		C632	0CN1510K518	150P 50V K B TA26
		C633	0CN1030F678	0.01M 16V M Y TA26
		C634	0CX2200K408	22P 50V J SL TP26
		C635	0CN1030F678	0.01M 16V M Y TA26
		C636	0CN1030F678	0.01M 16V M Y TA26
		C637	0CN1030F678	0.01M 16V M Y TA26
		C638	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C639	0CN1510K518	150P 50V K B TA26
		C640	0CN1030F678	0.01M 16V M Y TA26
		C641	0CN1510K518	150P 50V K B TA26
		C642	0CN1020K518	1000P 50V K B TA26
		C643	0CN3310K518	330P 50V K B TA26
		C645	0CN1030F678	0.01M 16V M Y TA26
		C646	0CN1040K948	0.1UF 50V Z F TA26 D
		C647	0CN1030F678	0.01M 16V M Y TA26
		C648	0CN3910K518	390P 50V K B TA26
		C649	0CN1040K948	0.1UF 50V Z F TA26 D
		C650	0CN1030F678	0.01M 16V M Y TA26
		C701	0CE4754K638	47M SRA 50V M FM5 TP(5)
		C702	0CN1020K518	1000P 50V K B TA26
		C703	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C704	0CN1030F678	0.01M 16V M Y TA26
		C705	0CN1040K948	0.1UF 50V Z F TA26 D
		C706	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C707	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C709	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C711	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C712	0CX1030K945	0.01UF 50V Z F TR
		C713	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C714	0CQ1032K409	0.01UF S 50V J PE TP
		C715	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C716	0CQ1522K409	1500PF S 50V J PE TP
		C717	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C718	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C719	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C720	0CN1030F678	0.01M 16V M Y TA26
		C721	0CE2264F638	22M SRA 16V M FM5 TP(5)

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		C722	0CN1040K948	0.1UF 50V Z F TA26 D
		C723	0CN1040K948	0.1UF 50V Z F TA26 D
		C732	0CX2400K408	24P 50V J SL TA26
		C733	0CX4700K408	47P 50V J SL TA26
		C735	0CX1030K945	0.01UF 50V Z F TR
		C736	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C737	0CN1030F678	0.01M 16V M Y TA26
		C751	0CN1010K518	100P 50V K B TA26
		C752	0CN2230H948	0.022M 25V Z F TA26
		C753	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C754	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C755	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C756	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C757	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C758	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C759	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C760	0CC4700K415	47P 50V J NPO TP
		C761	0CQ3921N409	0.0039U 100V J POLY TP
		C762	0CN1040K948	0.1UF 50V Z F TA26 D
		C763	0CQ1031N409	0.01UF 100V J PE TP
		C764	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C767	0CQ1232K409	0.012U S 50V J TS TP
		C768	0CQ1232K409	0.012U S 50V J TS TP
		C769	0CN2230H948	0.022M 25V Z F TA26
		C770	0CN2230H948	0.022M 25V Z F TA26
		C771	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C772	0CN2210K518	220P 50V K B TA26
		C815	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C816	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C817	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C818	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C819	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C820	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C821	0CQ4722K409	0.0047U S 50V J TS TP
		C822	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C823	0CN1040K948	0.1UF 50V Z F TA26 D
		C824	0CQ2232K409	0.022UF S 50V J PE TP
		C825	0CQ4722K409	0.0047U S 50V J TS TP
		C826	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C827	0CQ1532K409	0.015UF S 50V J PE TP
		C828	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C829	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C830	0CN1030F678	0.01M 16V M Y TA26
		C831	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C832	0CQ1022K409	1000PF S 50V J PE TP
		C833	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C834	0CN2720F668	2700P 16V M X TA26
		C835	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C836	0CN1040K948	0.1UF 50V Z F TA26 D
		C837	0CN4720F668	4700P 16V M X TA26
		C838	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C839	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C840	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C841	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C842	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C843	0CN4720F668	4700P 16V M X TA26
		C844	0CN1040K948	0.1UF 50V Z F TA26 D
		C845	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C846	0CN1030F678	0.01M 16V M Y TA26
		C847	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C848	0CN2230H948	0.022M 25V Z F TA26
		C849	0CN2230H948	0.022M 25V Z F TA26

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		C850	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C851	0CN1030F678	0.01M 16V M Y TA26
		C853	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C854	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C855	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C856	0CQ1032K409	0.01UF S 50V J PE TP
		C857	0CQ1032K409	0.01UF S 50V J PE TP
		C858	0CQ3931N409	0.039UF 100V J PE TP
		C859	0CN2210K518	220P 50V K B TA26
		C860	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C861	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C862	0CN1040K948	0.1UF 50V Z F TA26 D
		C863	0CN1040K948	0.1UF 50V Z F TA26 D
		C864	0CN1040K948	0.1UF 50V Z F TA26 D
		C870	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C871	0CQ1032K409	0.01UF S 50V J PE TP
		C872	0CQ1032K409	0.01UF S 50V J PE TP
		C873	0CQ5632K409	0.0560UF S 50V J PE TP
		C874	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C876	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C877	0CN4710K518	470P 50V K B TA26
		C878	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C879	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C881	0CE1063F638	10M SRE/SE 16V M FM5 TP(5)
		C882	0CE1073F638	100M SRE 16V M FM5 TP(5)
		C883	0CN1030F678	0.01M 16V M Y TA26
		C884	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C885	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C887	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C901	0CN1020K518	1000P 50V K B TA26
		C902	0CN1020K518	1000P 50V K B TA26
		C903	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C905	0CN1040K948	0.1UF 50V Z F TA26 D
		C906	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C908	0CN1040K948	0.1UF 50V Z F TA26 D
		C909	0CN1010K518	100P 50V K B TA26
		C910	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C911	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C912	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C913	0CN1030F678	0.01M 16V M Y TA26
		C914	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C915	0CX4300K408	43P 50V J SL TA26
		C916	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C917	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C918	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C919	0CN4710K518	470P 50V K B TA26
		C920	0CN1020K518	1000P 50V K B TA26
		C923	0CX1000K408	10P 50V J SL TA26
		C924	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C925	0CN1030F678	0.01M 16V M Y TA26
		C926	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C927	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C929	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C930	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C931	0CN1030F678	0.01M 16V M Y TA26
		C932	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C933	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C934	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C935	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C936	0CN1020K518	1000P 50V K B TA26
		C937	0CN4710K518	470P 50V K B TA26
		C940	0CX1000K408	10P 50V J SL TA26

S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		C943	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C944	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C945	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C946	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C947	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C948	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C949	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C950	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C9A2	0CN4710K518	470P 50V K B TA26
		C9A8	0CN4710K518	470P 50V K B TA26
		C9A9	0CN1010K518	100P 50V K B TA26
OR		CP01	624-088B	ECQU2A104MV 0.1UF/250V MATSUSI
		CP01	624-088F	PCX2 275V 0.1UF,M (PILKO)
OR		CP02	624-088B	ECQU2A104MV 0.1UF/250V MATSUSI
		CP02	624-088F	PCX2 275V 0.1UF,M (PILKO)
		CP03	0CG2210U610	220 PF 400V M B R(NK,AD,SD)
		CP04	0CQ1041N409	0.1U 100V J POLY TP
		CP05	624-082C	100MF/400V SHL SMPS S/Y
		CP06	0CE3368H638	33UF KME 25V M FM5 TP5
		CP07	0CQ5622K409	5600PF S 50V J PE TP
		CP08	0CQ4731N409	0.047U 100V J POLY TP
		CP09	624-087A	HIGH-VOL 150P1KV SMPS NEW-KOR
		CP10	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		CP11	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP12	0CE108BF630	1000UF KME 16V M FM5 BULK
		CP13	0CE1086D638	1000UF SMS 10V M FM5 TP5
		CP14	624-085D	CE 47UF/50V KME (SMPS)
		CP15	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP16	0CE108BH630	1000UF KME TYPE 25V M FM5 BULK
		CP17	0CE477BH638	470UF KME 25V M FM5 TP5
		CP18	624-085D	CE 47UF/50V KME (SMPS)
		CP19	0CE1074F638	100U SRA 16V M FM5 TP(5)
		CP20	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP21	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP24	0CQ1031Y519	0.01UF D 630V K PE NI TP
		CP25	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP27	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP28	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP29	0CQ1022K409	1000PF S 50V J PE TP
		CP30	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP40	0CG3320U642	3300 PF 400V M F FCM (NK,AD,SD)
		CP41	0CE1064F638	10M SRA 16V M FM5 TP(5)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		D606	0DD133009AA	1SS133 DETECT,SW TP
		D607	0DD133009AA	1SS133 DETECT,SW TP
		D901	0DD133009AA	1SS133 DETECT,SW TP
		D902	0DD133009AA	1SS133 DETECT,SW TP
		DP01	0DD207000AB	2A07 2A RECT(T/S)P-12.5 F DELT
		DP02	0DD133009AA	1SS133 DETECT,SW TP
		DP03	0DD133009AA	1SS133 DETECT,SW TP
		DP04	0DC221009AA	ERA22 10 KFLB,TP, R T/P,FUJI
		DP05	0DD010009AC	EU01W(R-FORM) TP SANKEN
		DP06	0DD140000BA	FMBG14L SANKEN
		DP08	0DD120000BC	FMPG12S SANKEN
		DP09	0DD010009AC	EU01W(R-FORM) TP SANKEN
		DP10	0DD010009AC	EU01W(R-FORM) TP SANKEN
LEVEL METER				
		DIG201	6302R2P004A	SVV11MM16 PAL SUPER 15MM
FUSE				
		FP01	S85-011C	T 1.6A 250V S506
FILTER				
		FL301	6200RD8001A	A285TCIS-K5394 TOKO 12.44M TRA
		FL302	6200RD8003A	A6285TCHS-K5395 TOKO 5.68M TRA
		FL303	6200RD8002A	TH315L.NMS-K5396TAD(1149) TOKO
		FL751	616-038D	CERAMIC SFT5.5MA MURATA
		FL752	616-038E	CERAMIC SFT5.74MA
		LP01	616-145H	SHT LFS2020V4-04350
IC				
		IC002	01MA331700A	AN3317K PRE AMP 22DIP
		IC101	01SM565000A	SDA5650 DIP14 BK VPS+PCS
		IC151	01SA747619D	LC74761 M-9725 30DIP BK OSD S90
		IC201	01MA125100A	MN12510 QFP44 FLP DRIVE
		IC202	01RH152180B	BA15218(HEAD-PHONE AMP)DIP
		IC301	01JV005400A	JCP0054 80QFP BK Y/C
		IC302	01HH118092A	HA118092FP 16SOP TP BUFFER
		IC303	01MI623530A	M62353FP 16SOP TP D/A CONVERTO
		IC304	01JV207600B	VC2076DP (S-VHS EMPHASIS) DIP
		IC305	01AL241600B	AT24C16-10PC 8D EEPROM 16K
		IC306	01SS431000A	KA431AZ (LM431AZ)
		IC401	01JV004200A	JCP0042 100QFP BK SEPA
		IC403	01JR224000B	NJM2240D DIP8 BK SW
		IC501	01GS397737A	GMS3977RA-A37F 100QFP BK MICO
		IC502	01SS308200A	KA3082 10-SIP BK MOTOR DRIVE
		IC504	01KE703100A	KIA7031P 3T MATRIX
		IC505	01KE704200B	KIA7042P 3T 4.2V RESET(TAPING)
		IC601	01HI118191A	HA118191NT PRE-AMP DIP
		IC701	01SA701600A	LA7016 ANALOG SW
		IC751	01TF286014A	U2860B DIP14 FM DEMOD
		IC752	01PH984000A	TDA9840 ST MATRIX
		IC802	01RH775500A	BA7755A(HEAD S/W)
		IC890	01SS324000B	KA324 OP AMP
		IC901	01SG640000A	STV6400 S/W IC DIP
		IC902	01SA701600A	LA7016 ANALOG SW
		IC903	01SS324000B	KA324 OP AMP
		ICP01	01FE531100A	FA5311P PWM IC (FUJI) DIP
		ICP01	01SS755200A	KA7552 PWMIC 8DIP 30V
		ICP03	01SS431000A	KA431AZ (LM431AZ)

[illegible]

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		L406	0LA0332K018	33M K 2.3X3.4 L5 TP
		L407	0LA0152K018	15M K 2.3X3.4 L5 TP
		L408	0LA0332K018	33M K 2.3X3.4 L5 TP
		L409	0LA0152K018	15M K 2.3X3.4 L5 TP
		L410	0LA0332K018	33M K 2.3X3.4 L5 TP
		L411	0LA0222K018	22M K 2.3X3.4 L5 TP
		L414	0LA0222K018	22M K 2.3X3.4 L5 TP
		L415	0LA0332K018	33M K 2.3X3.4 L5 TP
		L416	0LR0472J025	47UH 5% 4X5 TR5
		L417	0LR0472J025	47UH 5% 4X5 TR5
		L418	0LR0472J025	47UH 5% 4X5 TR5
		L502	0LR1000J035	100UH 5% 4X5 TR5
		L503	0LR2200J025	220UH 5% 4X5 TR5
		L601	0LR1000K035	100M K 6X6 L5 TP
		L602	0LA0562K018	56M K 2.3X3.4 L5 TP
		L603	0LA0472K018	47M K 2.3X3.4 L5 TP
		L604	0LA1500K018	150M K 2.3X3.4 L5 TP
		L605	0LA1800K018	180M K 2.3X3.4 L5 TP
		L606	0LA0562K018	56M K 2.3X3.4 L5 TP
		L607	0LR1000K035	100M K 6X6 L5 TP
		L608	0LR1000K035	100M K 6X6 L5 TP
		L609	0LA0472K018	47M K 2.3X3.4 L5 TP
		L611	0LA0182K018	18M K 2.3X3.4 L5 TP
		L612	0LR1000K035	100M K 6X6 L5 TP
		L613	0LA2200K018	220M K 2.3X3.4 L5 TP
		L614	0LA2200K018	220M K 2.3X3.4 L5 TP
		L615	0LA0102K018	10M K 2.3X3.4 L5 TP
		L702	0LR0472J025	47UH 5% 4X5 TR5
		L703	0LR0102K035	10M K 6X6 L5 TP
		L704	0LR1000J025	100UH 5% 4X5 TR5
		L705	0LR1000J025	100UH 5% 4X5 TR5
		L706	0LR1000J025	100UH 5% 4X5 TR5
		L711	0LR1000J025	100UH 5% 4X5 TR5
		L712	0LA0122K018	12M K 2.3X3.4 L5 TP
		L751	0LR1000K035	100M K 6X6 L5 TP
		L752	0LR1000K035	100M K 6X6 L5 TP
		L753	0LR2201J045	2200M J 6X7 L5 TP
		L801	0LA0102K018	10M K 2.3X3.4 L5 TP
		L802	0LR1502J045	0.015H J 6X7 L5 TP
		L804	0LR1000J025	100UH 5% 4X5 TR5
		L805	0LR820J025	820UH 5% 4X5 TR5
		L806	0LR820J025	820UH 5% 4X5 TR5
		L870	0LR820J025	820UH 5% 4X5 TR5
		L873	0LR820J025	820UH 5% 4X5 TR5
		L901	0LA1000K018	100M K 2.3X3.4 L5 TP
		L902	0LA1000K018	100M K 2.3X3.4 L5 TP
		L903	0LR1000J025	100UH 5% 4X5 TR5
		L904	0LR1000J025	100UH 5% 4X5 TR5
		L905	0LA1000K018	100M K 2.3X3.4 L5 TP
		L906	0LA1000K018	100M K 2.3X3.4 L5 TP
		L907	0LA1000K018	100M K 2.3X3.4 L5 TP
		L908	0LA1000K018	100M K 2.3X3.4 L5 TP
		L909	0LA0821K018	8.2M K 2.3X3.4 L5 TP
		L910	0LR1000J025	100UH 5% 4X5 TR5
		L911	0LA1000K018	100M K 2.3X3.4 L5 TP
		L912	0LA1000K018	100M K 2.3X3.4 L5 TP
		L913	0LA1000K018	100M K 2.3X3.4 L5 TP
		L914	0LA1000K018	100M K 2.3X3.4 L5 TP
		L915	0LA0821K018	8.2M K 2.3X3.4 L5 TP
		L916	0LR1000J025	100UH 5% 4X5 TR5
		L917	0LA0560K018	0.56M K 2.3X3.4 L5 TP
		L918	0LA0121K018	1.2M K 2.3X3.4 L5 TP

S	AL	LOC.ANO	PART NO(GS)	SPECIFICATION
		LP04	633-088D	CHOCK ,20UH,LEAD CUT
		LP06	633-088D	CHOCK ,20UH,LEAD CUT
		TL801	633-032G	BIAS OSC(KWANGSUNG)
		TL802	633-032G	BIAS OSC(KWANGSUNG)
LED				
	OR	LD201	0DL100000BB	LTL-16KEE RED
		LD201	0DL112000AJ	DL-11S2RNS(SUPER,RED,03)KOC
		LD202	0DL531100AA	SQ5311 GRN KOTECO
		LD501	0DL380009AA	GL380JTP IR LED D-27 TP SHARP
CONNECTOR				
		P5P01	561-283H	52556-0990 (STICK)
		P5P02	561-283H	52556-0990 (STICK)
		PM601	561-282K	IL-SDA-12P-S2T2 (STICK)
		PM602	561-282K	IL-SDA-12P-S2T2 (STICK)
		PM001	561-252E	TKC-G06P-A1 (TAIKO)
		PMD03	561-283H	52556-0990 (STICK)
		PMD04	561-256A	HPC0750-01WA(MODE S/W)HOSIDEN
		PMD05	561-280A	TMC-E02X-B1 ST
CIRCUIT BOARD ASSEMBLY				
		PBJ00	6871R-1058A	JACK I/O
		PBM00	6871R-1057E	MAIN(S909LP)
TRANSFORMER				
		PTP01	642-023H	S/W TRANS SHT-023H,DYT-023H
TRANSISTOR				
OR	OR	FEP01	0TF266600AA	2SK2666 BK SHINDENKEN 900V 3A
		FEP01	0TF380000AA	SSSS3N80A BK SAMSUNG 800V 3A T
		FEP01	0TF380020AA	SSSS3N80, T0220F
		Q001	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q002	0TR319909AF	KTC3199-BL MINI TP KEC
		Q003	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q101	0TR319909AF	KTC3199-BL MINI TP KEC
		Q102	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q103	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q154	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q155	0TR319909AF	KTC3199-BL MINI TP KEC
		Q156	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q157	0TR319909AF	KTC3199-BL MINI TP KEC
		Q159	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q160	0TR319909AF	KTC3199-BL MINI TP KEC
		Q161	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q162	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q201	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q202	0TR319909AF	KTC3199-BL MINI TP KEC
		Q203	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q204	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q201	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q302	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q303	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q304	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q305	0TR126709AC	KT1A1267-GR MINI TP KEC
		Q306	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q307	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q310	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q311	0TR103009AE	KRC103M-TP (KRC1203) KEC

RUN DATE : 98.11.19

S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		Q312	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q313	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		Q314	0TR126709AC	KTA1267-GR MINI TP KEC
		Q315	0TR319909AF	KTC3199-BL MINI TP KEC
		Q316	0TR319909AF	KTC3199-BL MINI TP KEC
		Q317	0TR126709AC	KTA1267-GR MINI TP KEC
		Q318	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q319	0TR319909AF	KTC3199-BL MINI TP KEC
		Q320	0TR319909AF	KTC3199-BL MINI TP KEC
		Q321	0TR319909AF	KTC3199-BL MINI TP KEC
		Q322	0TR319909AF	KTC3199-BL MINI TP KEC
		Q323	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q324	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q325	0TR126709AC	KTA1267-GR MINI TP KEC
		Q326	0TR319909AF	KTC3199-BL MINI TP KEC
		Q327	0TR126709AC	KTA1267-GR MINI TP KEC
		Q328	0TR319909AF	KTC3199-BL MINI TP KEC
		Q329	0TR319909AF	KTC3199-BL MINI TP KEC
		Q330	0TR319909AF	KTC3199-BL MINI TP KEC
		Q331	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q332	0TR126709AC	KTA1267-GR MINI TP KEC
		Q333	0TR319909AF	KTC3199-BL MINI TP KEC
		Q334	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q335	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q401	0TR319909AF	KTC3199-BL MINI TP KEC
		Q402	0TR319909AF	KTC3199-BL MINI TP KEC
		Q403	0TR319909AF	KTC3199-BL MINI TP KEC
		Q404	0TR319909AF	KTC3199-BL MINI TP KEC
		Q405	0TR319909AF	KTC3199-BL MINI TP KEC
		Q406	0TR319909AF	KTC3199-BL MINI TP KEC
		Q407	0TR319909AF	KTC3199-BL MINI TP KEC
		Q408	0TR319909AF	KTC3199-BL MINI TP KEC
		Q409	0TR126709AC	KTA1267-GR MINI TP KEC
		Q410	0TR126709AC	KTA1267-GR MINI TP KEC
		Q411	0TR319909AF	KTC3199-BL MINI TP KEC
		Q412	0TR319909AF	KTC3199-BL MINI TP KEC
		Q413	0TR319909AF	KTC3199-BL MINI TP KEC
		Q414	0TR126709AC	KTA1267-GR MINI TP KEC
		Q415	0TR126709AC	KTA1267-GR MINI TP KEC
		Q416	0TR319909AF	KTC3199-BL MINI TP KEC
		Q417	0TR126709AC	KTA1267-GR MINI TP KEC
		Q418	0TR126709AC	KTA1267-GR MINI TP KEC
		Q419	0TR319909AF	KTC3199-BL MINI TP KEC
		Q501	0TR933009DB	STA933Y TP KOTECO
		Q502	0TR933009DB	STA933Y TP KOTECO
		Q503	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q504	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q508	0TR319909AF	KTC3199-BL MINI TP KEC
		Q509	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		Q510	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q601	0TR319909AF	KTC3199-BL MINI TP KEC
		Q602	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q603	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q604	0TR319909AF	KTC3199-BL MINI TP KEC
		Q605	0TR126709AC	KTA1267-GR MINI TP KEC
		Q606	0TR319909AF	KTC3199-BL MINI TP KEC
		Q607	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q608	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q609	0TR319909AF	KTC3199-BL MINI TP KEC
		Q610	0TR319909AF	KTC3199-BL MINI TP KEC
		Q611	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q612	0TR319909AF	KTC3199-BL MINI TP KEC

S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		Q613	0TR319909AF	KTC3199-BL MINI TP KEC
		Q614	0TR319909AF	KTC3199-BL MINI TP KEC
		Q615	0TR319909AF	KTC3199-BL MINI TP KEC
		Q616	0TR319909AF	KTC3199-BL MINI TP KEC
		Q617	0TR126709AC	KTA1267-GR MINI TP KEC
		Q618	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q619	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q702	0TR319909AF	KTC3199-BL MINI TP KEC
		Q703	0TR126709AC	KTA1267-GR MINI TP KEC
		Q704	0TR319909AF	KTC3199-BL MINI TP KEC
		Q706	0TR319909AF	KTC3199-BL MINI TP KEC
		Q707	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q801	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q802	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q803	0TR319909AF	KTC3199-BL MINI TP KEC
		Q804	0TR126709AC	KTA1267-GR MINI TP KEC
		Q805	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q806	0TR126709AC	KTA1267-GR MINI TP KEC
		Q807	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q808	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		Q809	0TR319909AF	KTC3199-BL MINI TP KEC
		Q870	0TR319909AF	KTC3199-BL MINI TP KEC
		Q871	0TR319909AF	KTC3199-BL MINI TP KEC
		Q873	0TR319909AF	KTC3199-BL MINI TP KEC
		Q874	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q875	0TR126709AC	KTA1267-GR MINI TP KEC
		Q876	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		Q901	0TR126709AC	KTA1267-GR MINI TP KEC
		Q902	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q903	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q904	0TR319909AF	KTC3199-BL MINI TP KEC
		Q905	0TR319909AF	KTC3199-BL MINI TP KEC
		Q906	0TR126709AC	KTA1267-GR MINI TP KEC
		Q907	0TR126709AC	KTA1267-GR MINI TP KEC
		Q908	0TR126709AC	KTA1267-GR MINI TP KEC
		Q909	0TR126709AC	KTA1267-GR MINI TP KEC
		QP01	0TR141409AB	KTD1414-B CUTTING TP KEC
		QP02	0TR141409AB	KTD1414-B CUTTING TP KEC
		QP03	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		QP04	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		QP05	0TR103009AE	KRA103M-TP (KRA2203) KEC
		QP06	0TR103009AE	KRC103M-TP (KRC1203) KEC
		QP07	0TR319909AF	KTC3199-BL MINI TP KEC
		QP08	0TR103009AF	KRA103M-TP (KRA2203) KEC
		QP09	0TR103009AE	KRC103M-TP (KRC1203) KEC
		QP10	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		QP11	0TR709009AE	KSA709C-Y TP SAMSUNG T0-92
		QP12	0TR319909AF	KTC3199-BL MINI TP KEC
		QP13	0TR319909AF	KTC3199-BL MINI TP KEC
		QP16	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		QP17	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		QP18	0TR319909AF	KTC3199-BL MINI TP KEC
		QP19	0TR319909AF	KTC3199-BL MINI TP KEC
		SS01	0TR581139AA	ST5811S3T TP
		SS02	0TR581139AA	ST5811S3T TP
RESISTOR				
		RP27	0RD1003F608	100K 1/6W 5 TA26
REMOCON RECEIVER				
		RC201	6712R2038AA	PIC21143TL KODENSHI 17.6MM 37.

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S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
SENSOR				
	OR	ICP02	657-061B	PHOTO COUPLER PS2561-1-V NEC
	OR	ICP02	657-062A	PC817 PHOTO COUPLER(SHARP)
		ICP02	657-063A	LTV-817B PHOTO COUPLER(LITEON)
		SS03	657-040B	REEL RPI-352Q01 D-27 ROHM-J
		SS04	657-040B	REEL RPI-352Q01 D-27 ROHM-J
SCART				
		JK903	573-006C	RGB SOKET SR-21S3 21PIN (BK)
		JK904	573-006D	RGB (BLUE)
SWITCH				
		JS201	556-164A	SRGPHJ1100
		SW201	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW202	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW203	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW204	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW205	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW206	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW207	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW208	556-282C	SKONQED ALPS 5MM 12V/50MAV TAC
		SW501	556-244A	REC SW,MPIU10105MMBO,MIC
		SW502	556-243D	F/L S/W,MPIU10400(MIC),D-27
		SW503	556-243D	F/L S/W,MPIU10400(MIC),D-27
		SW901	556-023M	KSA-2240,KIE,SILIDE
TUNER				
		TU701	6700RP3L01B	TADC-G001D LGEC BG 3N1
VARIABLE RESISTOR				
		VR201	611-024B	RK09K113000123B
		VR501	613-029W	VARIABLE EVN-CYY A03BE5-220K
		VR752	6110RSHK01A	RH063LCS3R,4.7K,ANGLE VR
		VR801	613-032U	RH063MC15ROWA (100K)
CRYSTAL				
		X151	529-022V	17.734476MHZ CL-12P 25PPM LEAD
		X502	529-001B	32.768KHZ 3°B,KDS
	OR	X502	529-001K	32.768KHZ SEIKO
		X751	529-020I	10.000000MHZ 30PPM NO-TU L=4.0
RESONATOR				
		X201	618-010A	CST4.00MGW-TF01S MURATA
		X301	6202R1443CA	HCA9U KJE RADIAL 4.433619MHZ 1
		X501	6202R1100AC	10MHZ 30PPM 12PF 49/U BK KJE
ZENER DIODE				
		ZD201	0DZ220009ED	MTZ22B T-77 TP ROHM
		ZD202	0DZ160009BA	MTZ16B TP ROHM-K
		ZD203	0DZ160009BA	MTZ16B TP ROHM-K
		ZD204	0DZ160009BA	MTZ16B TP ROHM-K
		ZD205	0DZ160009BA	MTZ16B TP ROHM-K
		ZD206	0DZ160009BA	MTZ16B TP ROHM-K
		ZD207	0DZ160009BA	MTZ16B TP ROHM-K
		ZD208	0DZ160009BA	MTZ16B TP ROHM-K
		ZD209	0DZ160009BA	MTZ16B TP ROHM-K

S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		ZD210	0DZ160009BA	MTZ16B TP ROHM-K
		ZD211	0DZ160009BA	MTZ16B TP ROHM-K
		ZD212	0DZ160009BA	MTZ16B TP ROHM-K
		ZD213	0DZ160009BA	MTZ16B TP ROHM-K
		ZD214	0DZ160009BA	MTZ16B TP ROHM-K
		ZD215	0DZ160009BA	MTZ16B TP ROHM-K
		ZD217	0DZ510009EB	MTZ5.1B 0.5W TP ROHM-K
		ZD301	0DZ560009CB	MTZ5.6C TP(26MM) ROHM 5.6V
		ZD501	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD502	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD504	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD505	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD601	0DZ100009AA	MTZ10B MINI TP ROHM-K
		ZD701	0DZ330009AF	MTZ33B,TP,ROHM-K
		ZD702	0DZ560009CA	MTZ5.6B TP ROHM-K
		ZD901	0DZ150009BC	MTZ15B ROHM-K
		ZD902	0DZ150009BC	MTZ15B ROHM-K
		ZD903	0DZ150009BC	MTZ15B ROHM-K
		ZD904	0DZ150009BC	MTZ15B ROHM-K
		ZD905	0DZ110009CB	MTZ11B TP ROHM-K
		ZD906	0DZ150009BC	MTZ15B ROHM-K
		ZD907	0DZ150009BC	MTZ15B ROHM-K
		ZD911	0DZ150009BC	MTZ15B ROHM-K
		ZD912	0DZ150009BC	MTZ15B ROHM-K
		ZD913	0DZ150009BC	MTZ15B ROHM-K
		ZD914	0DZ150009BC	MTZ15B ROHM-K
		ZD915	0DZ150009BC	MTZ15B ROHM-K
		ZD916	0DZ150009BC	MTZ15B ROHM-K
		ZD917	0DZ150009BC	MTZ15B ROHM-K
		ZD918	0DZ150009BC	MTZ15B ROHM-K
		ZD921	0DZ150009BC	MTZ15B ROHM-K
		ZD922	0DZ150009BC	MTZ15B ROHM-K
		ZD923	0DZ150009BC	MTZ15B ROHM-K
		ZD924	0DZ150009BC	MTZ15B ROHM-K
		ZD927	0DZ150009BC	MTZ15B ROHM-K
		ZD928	0DZ150009BC	MTZ15B ROHM-K
		ZD929	0DZ150009BC	MTZ15B ROHM-K
		ZD930	0DZ150009BC	MTZ15B ROHM-K
		ZD931	0DZ150009BC	MTZ15B ROHM-K
		ZD932	0DZ150009BC	MTZ15B ROHM-K
		ZD933	0DZ150009BC	MTZ15B ROHM-K
		ZD934	0DZ150009BC	MTZ15B ROHM-K
		ZDP01	0DZ560009CA	MTZ5.6B TP ROHM-K
		ZDP03	0DZ130009AC	MTZ13B TP ROHM-K
		ZDP04	0DZ100009AA	MTZ10B MINI TP ROHM-K
		ZDP07	0DZ130009AC	MTZ13B TP ROHM-K
		ZDP08	0DZ180009CA	MTZ18B TP ROHM-K
		ZDP09	0DZ220009ED	MTZ22B T-77 TP ROHM

Electrical Section

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CAUTION: The * marks in the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the SAFETY PRECAUTIONS and SERVICING PRECAUTIONS in the manual. Do not degrade the safety of the unit through improper servicing.

Tolerance

Symbol	C	J	K	M	N	Z	P	A
%	±2	±5	±10	±20	±30	+80 -20	+100 -10	+100 -10

CC, CJ, CK: Capacitor, Ceramic
CE: Capacitor, Electrolytic
CQ: Capacitor, Polyester

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
RESISTOR				
		R001	ORD2702F608	27K 1/6W 5 TA26
		R002	ORD4701F608	4.7K 1/6W 5 TA26
		R003	ORD1201F608	1.2K 1/6W 5 TA26
		R004	ORD1201F608	1.2K 1/6W 5 TA26
		R005	ORD2701F608	2.7K 1/6W 5 TA26
		R006	ORD1502F608	15K 1/6W 5 TA26
		R007	ORD5601F608	5.6K 1/6W 5 TA26
		R008	ORD3300F608	330 1/6W 5 TA26
		R009	ORD3300F608	330 1/6W 5 TA26
		R010	ORD0102F608	10 1/6W 5 TA26
		R011	ORD0102F608	10 1/6W 5 TA26
		R012	ORD3300F608	330 1/6W 5 TA26
		R013	ORD1001F608	1.0K 1/6W 5 TA26
		R014	ORD4701F608	4.7K 1/6W 5 TA26
		R015	ORD2201F608	2.2K 1/6W 5 TA26
		R016	ORD3301F608	3.3K 1/6W 5 TA26
		R017	ORD4701F608	4.7K 1/6W 5 TA26
		R101	ORD1000F608	100 1/6W 5 TA26
		R102	ORD5603F608	560K 1/6W 5 TA26
		R103	ORD6801F608	6.8K 1/6W 5 TA26
		R104	ORD6801F608	6.8K 1/6W 5 TA26
		R105	ORD5603F608	560K 1/6W 5 TA26
		R106	ORD8202F608	82K 1/6W 5 TA26
		R107	ORD1004F608	1.0M 1/6W 5 TA26
		R108	ORD1001F608	1.0K 1/6W 5 TA26
		R109	ORD4700F608	470 1/6W 5 TA26
		R110	ORD4701F608	4.7K 1/6W 5 TA26
		R111	ORD2202F608	22K 1/6W 5 TA26
		R151	ORD1001F608	1.0K 1/6W 5 TA26
		R152	ORD1001F608	1.0K 1/6W 5 TA26
		R153	ORD1001F608	1.0K 1/6W 5 TA26
		R154	ORD1000F608	100 1/6W 5 TA26
		R155	ORD1001F608	1.0K 1/6W 5 TA26
		R156	ORD1001F608	1.0K 1/6W 5 TA26
		R157	ORD1501F608	1.5K 1/6W 5 TA26
		R158	ORD6801F608	6.8K 1/6W 5 TA26
		R159	ORD1200F608	120 1/6W 5 TA26
		R160	ORD1001F608	1.0K 1/6W 5 TA26
		R161	ORD1001F608	1.0K 1/6W 5 TA26
		R162	ORD1001F608	1.0K 1/6W 5 TA26
		R163	ORD2201F608	2.2K 1/6W 5 TA26
		R164	ORD2201F608	2.2K 1/6W 5 TA26
		R165	ORD1801F608	1.8K 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R166	ORD1503F608	150K 1/6W 5 TA26
		R167	ORD1003F608	100K 1/6W 5 TA26
		R168	ORD1202F608	12K 1/6W 5 TA26
		R169	ORD4700F608	470 1/6W 5 TA26
		R170	ORD4702F608	47K 1/6W 5 TA26
		R171	ORD1802F608	18K 1/6W 5 TA26
		R172	ORD1000F608	100 1/6W 5 TA26
		R173	ORD1001F608	1.0K 1/6W 5 TA26
		R174	ORD1001F608	1.0K 1/6W 5 TA26
		R175	ORD1001F608	1.0K 1/6W 5 TA26
		R176	ORD1501F608	1.5K 1/6W 5 TA26
		R179	ORD3301F608	3.3K 1/6W 5 TA26
		R180	ORD1001F608	1.0K 1/6W 5 TA26
		R184	ORD8201F608	8.2K 1/6W 5 TA26
		R186	ORD1001F608	1.0K 1/6W 5 TA26
		R187	ORD1001F608	1.0K 1/6W 5 TA26
		R189	ORD1001F608	1.0K 1/6W 5 TA26
		R201	ORD3300F608	330 1/6W 5 TA26
		R202	ORD3300F608	330 1/6W 5 TA26
		R203	ORD3300F608	330 1/6W 5 TA26
		R204	ORD2702F608	27K 1/6W 5 TA26
		R206	ORD0752F608	75 1/6W 5 TA26
		R207	ORD3300F608	330 1/6W 5 TA26
		R208	ORD3300F608	330 1/6W 5 TA26
		R209	ORD3300F608	330 1/6W 5 TA26
		R210	ORD2702F608	27K 1/6W 5 TA26
		R211	ORD2702F608	27K 1/6W 5 TA26
		R212	ORD2702F608	27K 1/6W 5 TA26
		R213	ORD2702F608	27K 1/6W 5 TA26
		R214	ORD2702F608	27K 1/6W 5 TA26
		R215	ORD2702F608	27K 1/6W 5 TA26
		R216	ORD2702F608	27K 1/6W 5 TA26
		R217	ORD2702F608	27K 1/6W 5 TA26
		R218	ORD1801F608	1.8K 1/6W 5 TA26
		R219	ORD1501F608	1.5K 1/6W 5 TA26
		R220	ORD2201F608	2.2K 1/6W 5 TA26
		R221	ORD2701F608	2.7K 1/6W 5 TA26
		R222	ORD3901F608	3.9K 1/6W 5 TA26
		R223	ORD6801F608	6.8K 1/6W 5 TA26
		R224	ORD1202F608	12K 1/6W 5 TA26
		R225	ORD2701F608	2.7K 1/6W 5 TA26
		R226	ORD2203F608	220K 1/6W 5 TA26
		R227	ORD1000F608	100 1/6W 5 TA26
		R228	ORD2203F608	220K 1/6W 5 TA26
		R229	ORD6801F608	6.8K 1/6W 5 TA26

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R230	ORD4701F608	4.7K 1/6W 5 TA26
		R231	ORD1201F608	1.2K 1/6W 5 TA26
		R232	ORD2202F608	22K 1/6W 5 TA26
		R233	ORD4701F608	4.7K 1/6W 5 TA26
		R234	ORD2202F608	22K 1/6W 5 TA26
		R235	ORD0152F608	15 1/6W 5 TA26
		R236	ORD0152F608	15 1/6W 5 TA26
		R237	ORD1003F608	100K 1/6W 5 TA26
		R240	ORD0102F608	10 1/6W 5 TA26
		R241	ORD0102F608	10 1/6W 5 TA26
		R242	ORD0471F608	4.7 1/6W 5 TA26
		R243	ORD0752F608	75 1/6W 5 TA26
		R244	ORD0752F608	75 1/6W 5 TA26
		R245	ORD0472F608	47 1/6W 5 TA26
		R246	ORD2702F608	27K 1/6W 5 TA26
		R247	ORD2702F608	27K 1/6W 5 TA26
		R248	ORD2702F608	27K 1/6W 5 TA26
		R254	ORD1001F608	1.0K 1/6W 5 TA26
		R301	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R302	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R303	ORH3300D622	33K 1/10W 5 D.R/TP
		R304	ORH2701D622	2.7K 1/10W 5 D.R/TP
		R305	ORH1002D622	10K 1/10W 5 D.R/TP
		R306	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R307	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R308	ORH1002D622	10K 1/10W 5 D.R/TP
		R309	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R310	ORH1801D622	1.8K 1/10W 5 D.R/TP
		R311	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R312	ORH1000D622	100 1/10W 5 D.R/TP
		R313	ORH1000D622	100 1/10W 5 D.R/TP
		R314	ORH6803D622	680K 1/10W 5 D.R/TP
		R315	ORH8200D622	82K 1/10W 5 D.R/TP
		R316	ORH6801D622	6.8K 1/10W 5 D.R/TP
		R317	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R318	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R319	ORH5100D622	510 1/10W 5 D.R/TP
		R320	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R321	ORH2202D622	22K 1/10W 5 D.R/TP
		R322	ORH6802D622	68K 1/10W 5 D.R/TP
		R323	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R324	ORH3302D622	33K 1/10W 5 D.R/TP
		R325	ORH8201D622	8.2K 1/10W 5 D.R/TP
		R326	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R327	ORH2702D422	27K 1/10W 1% D.R/TP
		R328	ORH8201D622	8.2K 1/10W 5 D.R/TP
		R329	ORH1000D622	100 1/10W 5 D.R/TP
		R330	ORH4704D622	4.7M 1/10W 5 TA
		R331	ORH2200D622	220 1/10W 5 D.R/TP
		R332	ORH3300D622	330 1/10W 5 D.R/TP
		R333	ORH1000D622	100 1/10W 5 D.R/TP
		R334	ORH1000D622	100 1/10W 5 D.R/TP
		R335	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R336	ORH1002D622	10K 1/10W 5 D.R/TP
		R337	ORH8202D622	82K 1/10W 5 D.R/TP
		R338	ORH2702D622	27K 1/10W 5 D.R/TP
		R339	ORH1800D622	180 1/10W 5 D.R/TP
		R340	ORH1202D622	12K 1/10W 5 D.R/TP
		R341	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R342	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R343	ORH3901D622	3.9K 1/10W 5 D.R/TP
		R344	ORH1802D622	18K 1/10W 5 D.R/TP

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R345	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R346	ORH6800D622	680 1/10W 5 D.R/TP
		R347	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R348	ORH6800D622	680 1/10W 5 D.R/TP
		R349	ORH5601D622	5.6K 1/10W 5 D.R/TP
		R350	ORH8200D622	820 1/10W 5 D.R/TP
		R351	ORH5600D622	560 1/10W 5 D.R/TP
		R352	ORH1201D622	1.2K 1/10W 5 D.R/TP
		R353	ORH1201D622	1.2K 1/10W 5 D.R/TP
		R354	ORH3300D622	330 1/10W 5 D.R/TP
		R355	ORH5601D622	5.6K 1/10W 5 D.R/TP
		R356	ORH2702D622	27K 1/10W 5 D.R/TP
		R357	ORH3300D622	330 1/10W 5 D.R/TP
		R358	ORH4700D622	470 1/10W 5 D.R/TP
		R359	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R360	ORH5601D622	5.6K 1/10W 5 D.R/TP
		R361	ORH1802D622	18K 1/10W 5 D.R/TP
		R362	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R363	ORH4700D622	470 1/10W 5 D.R/TP
		R364	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R365	ORH1002D622	10K 1/10W 5 D.R/TP
		R366	ORH4700D622	470 1/10W 5 D.R/TP
		R367	ORH4700D622	470 1/10W 5 D.R/TP
		R368	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R369	ORH3901D622	3.9K 1/10W 5 D.R/TP
		R370	ORH5600D622	560 1/10W 5 D.R/TP
		R371	ORH5600D622	560 1/10W 5 D.R/TP
		R372	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R373	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R374	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R375	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R376	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R377	ORH5601D622	5.6K 1/10W 5 D.R/TP
		R378	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R379	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R380	ORH8200D622	820 1/10W 5 D.R/TP
		R381	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R382	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R383	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R384	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R385	ORH4701D622	4.7K 1/10W 5 D.R/TP
		R386	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R387	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R388	ORH3301D422	3.30K 1/10W 1% D.R/TP
		R389	ORH3301D422	3.30K 1/10W 1% D.R/TP
		R390	ORH4700D422	470 1/10W 1% D.R/TP
		R391	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R392	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R393	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R394	ORH1201D422	1.2K 1/10W 1% D.R/TP
		R395	ORH1000D622	100 1/10W 5 D.R/TP
		R396	ORH1501D622	1.5K 1/10W 5 D.R/TP
		R397	ORH1500D622	150 1/10W 5 D.R/TP
		R398	ORH3301D422	3.30K 1/10W 1% D.R/TP
		R399	ORH3900D422	390 1/10W 1% D.R/TP
		R3A1	ORH3301D422	3.30K 1/10W 1% D.R/TP
		R3A2	ORH3900D422	390 1/10W 1% D.R/TP
		R3A3	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R3A4	ORH3900D422	39

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S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		R3A8	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R3A9	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R3B1	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R3B2	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R3B3	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R3B4	ORH4700D622	470 1/10W 5 D.R/TP
		R3B5	ORH5600D622	560 1/10W 5 D.R/TP
		R3B6	ORH5600D622	560 1/10W 5 D.R/TP
		R401	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R402	ORH4700D622	470 1/10W 5 D.R/TP
		R403	ORH3300D622	330 1/10W 5 D.R/TP
		R404	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R405	ORH3301D622	3.3K 1/10W 5 D.R/TP
		R406	ORH2700D622	270 1/10W 5 D.R/TP
		R407	ORH2700D622	270 1/10W 5 D.R/TP
		R408	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R409	ORH8200D622	820 1/10W 5 D.R/TP
		R410	ORH2200D622	220 1/10W 5 D.R/TP
		R411	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R412	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R413	ORH8200D622	820 1/10W 5 D.R/TP
		R414	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R415	ORH2200D622	220 1/10W 5 D.R/TP
		R416	ORH2700D622	270 1/10W 5 D.R/TP
		R417	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R418	ORH6800D622	680 1/10W 5 D.R/TP
		R419	ORH2201D622	2.2K 1/10W 5 D.R/TP
		R420	ORH2200D622	220 1/10W 5 D.R/TP
		R421	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R422	ORH3901D622	3.9K 1/10W 5 D.R/TP
		R423	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R424	ORH0472D622	47 1/10W 5 D.R/TP
		R425	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R426	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R427	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R428	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R429	ORH2700D622	270 1/10W 5 D.R/TP
		R430	ORH3900D622	390 1/10W 5 D.R/TP
		R431	ORH2701D622	2.7K 1/10W 5 D.R/TP
		R432	ORH3302D622	33K 1/10W 5 D.R/TP
		R433	ORH1202D622	12K 1/10W 5 D.R/TP
		R434	ORH2202D622	22K 1/10W 5 D.R/TP
		R435	ORH2202D622	22K 1/10W 5 D.R/TP
		R436	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R437	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R438	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R439	ORH2700D622	270 1/10W 5 D.R/TP
		R440	ORH3900D622	390 1/10W 5 D.R/TP
		R441	ORH8200D622	820 1/10W 5 D.R/TP
		R442	ORH2701D622	2.7K 1/10W 5 D.R/TP
		R443	ORH5602D622	56K 1/10W 5 D.R/TP
		R444	ORH8200D622	820 1/10W 5 D.R/TP
		R445	ORH1802D622	18K 1/10W 5 D.R/TP
		R448	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R449	ORH4702D622	47K 1/10W 5 D.R/TP
		R455	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R456	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R457	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R458	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R459	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R460	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R461	ORH1001D622	1.0K 1/10W 5 D.R/TP

S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		R462	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R463	ORH1001D622	1.0K 1/10W 5 D.R/TP
		R464	ORH5600D622	560 1/10W 5 D.R/TP
		R465	ORH8200D622	820 1/10W 5 D.R/TP
		R466	ORH1201D622	1.2K 1/10W 5 D.R/TP
		R501	ORD4701F608	4.7K 1/5W 5 TA26
		R502	ORD4701F608	4.7K 1/5W 5 TA26
		R503	ORD4701F608	4.7K 1/5W 5 TA26
		R504	ORD4701F608	4.7K 1/5W 5 TA26
		R505	ORD4701F608	4.7K 1/5W 5 TA26
		R506	ORD4701F608	4.7K 1/5W 5 TA26
		R507	ORD1003F608	100K 1/5W 5 TA26
		R508	ORD4701F608	4.7K 1/5W 5 TA26
		R509	ORD1003F608	100K 1/5W 5 TA26
		R510	ORD1001F608	1.0K 1/5W 5 TA26
		R511	ORD3300F608	330 1/5W 5 TA26
		R512	ORD3300F608	330 1/5W 5 TA26
		R513	ORD1202F608	12K 1/5W 5 TA26
		R514	ORD4701F608	4.7K 1/5W 5 TA26
		R515	ORD3300F608	330 1/5W 5 TA26
		R516	ORD3300F608	330 1/5W 5 TA26
		R517	ORD1202F608	12K 1/5W 5 TA26
		R518	ORD4701F608	4.7K 1/5W 5 TA26
		R519	ORD2200F608	220 1/5W 5 TA26
		R520	ORD1001F608	1.0K 1/5W 5 TA26
		R521	ORD1003F608	100K 1/5W 5 TA26
		R522	ORD1001F608	1.0K 1/5W 5 TA26
		R523	ORD1002F608	10K 1/5W 5 TA26
		R524	ORD1003F608	100K 1/5W 5 TA26
		R525	ORD2700F608	270 1/5W 5 TA26
		R526	ORD5601F608	5.6K 1/5W 5 TA26
		R527	ORD1001F608	1.0K 1/5W 5 TA26
		R528	ORD1001F608	1.0K 1/5W 5 TA26
		R529	ORD1001F608	1.0K 1/5W 5 TA26
		R530	ORD1001F608	1.0K 1/5W 5 TA26
		R531	ORD1002F608	10K 1/5W 5 TA26
		R532	ORD1002F608	10K 1/5W 5 TA26
		R533	ORS0621K619	6.2 OHM 2W 5% TR R TP
		R535	ORD2201F608	2.2K 1/5W 5 TA26
		R536	ORD1002F608	10K 1/5W 5 TA26
		R537	ORD1002F608	10K 1/5W 5 TA26
		R538	ORD1002F608	10K 1/5W 5 TA26
		R539	ORD5602F608	56K 1/5W 5 TA26
		R540	ORD1001F608	1.0K 1/5W 5 TA26
		R541	ORD4701F608	4.7K 1/5W 5 TA26
		R544	ORD1001F608	1.0K 1/5W 5 TA26
		R553	ORD1001F608	1.0K 1/5W 5 TA26
		R554	ORD5600F608	560 1/5W 5 TA26
		R555	ORD5600F608	560 1/5W 5 TA26
		R559	ORD1004F608	1.0M 1/5W 5 TA26
		R560	ORD5601F608	5.6K 1/5W 5 TA26
		R561	ORD1002F608	10K 1/5W 5 TA26
		R562	ORD1003F608	100K 1/5W 5 TA26
		R564	ORD1002F608	10K 1/5W 5 TA26
		R565	ORD1002F608	10K 1/5W 5 TA26
		R566	ORD2203F608	220K 1/5W 5 TA26
		R567	ORD2203F608	220K 1/5W 5 TA26
		R575	ORD1000F608	100 1/5W 5 TA26
		R576	ORD1000F608	100 1/5W 5 TA26
		R578	ORD6800F608	680 1/5W 5 TA26
		R579	ORD3902F608	39K 1/5W 5 TA26
		R580	ORD6803F608	680K 1/5W 5 TA26

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S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		R587	ORD1202F608	12K 1/5W 5 TA26
		R588	ORD5601F608	5.6K 1/5W 5 TA26
		R589	ORD3302F608	33K 1/5W 5 TA26
		R590	ORD2200F608	220 1/5W 5 TA26
		R591	ORD1001F608	1.0K 1/5W 5 TA26
		R592	ORD1001F608	1.0K 1/5W 5 TA26
		R593	ORD2702F608	27K 1/5W 5 TA26
		R5J3	ORD2201F608	2.2K 1/5W 5 TA26
		R5J4	ORD2201F608	2.2K 1/5W 5 TA26
		R5M1	ORD1001F608	1.0K 1/5W 5 TA26
		R5M2	ORD1001F608	1.0K 1/5W 5 TA26
		R5M3	ORD1001F608	1.0K 1/5W 5 TA26
		R5M4	ORD1001F608	1.0K 1/5W 5 TA26
		R5S1	ORD1001F608	1.0K 1/5W 5 TA26
		R5S2	ORD1001F608	1.0K 1/5W 5 TA26
		R5S3	ORD1001F608	1.0K 1/5W 5 TA26
		R5S4	ORD1001F608	1.0K 1/5W 5 TA26
		R5S5	ORD3301F608	3.3K 1/5W 5 TA26
		R5S6	ORD1502F608	15K 1/5W 5 TA26
		R5S7	ORD1002F608	10K 1/5W 5 TA26
		R5S8	ORD2201F608	2.2K 1/5W 5 TA26
		R5S9	ORD2201F608	2.2K 1/5W 5 TA26
		R601	ORD0682F608	68 1/5W 5 TA26
		R602	ORD4700F608	470 1/5W 5 TA26
		R603	ORD0122F608	12 1/5W 5 TA26
		R604	ORD0682F608	68 1/5W 5 TA26
		R605	ORD0682F608	68 1/5W 5 TA26
		R606	ORD4700F608	470 1/5W 5 TA26
		R607	ORD0682F608	68 1/5W 5 TA26
		R608	ORD1801F608	1.8K 1/5W 5 TA26
		R609	ORD1501F608	1.5K 1/5W 5 TA26
		R610	ORD1202F608	12K 1/5W 5 TA26
		R611	ORD1001F608	1.0K 1/5W 5 TA26
		R612	ORD1001F608	1.0K 1/5W 5 TA26
		R613	ORD1000F608	100 1/5W 5 TA26
		R614	ORD2701F608	2.7K 1/5W 5 TA26
		R615	ORD1501F608	1.5K 1/5W 5 TA26
		R616	ORD2701F608	2.7K 1/5W 5 TA26
		R617	ORD1801F608	1.8K 1/5W 5 TA26
		R618	ORD2201F608	2.2K 1/5W 5 TA26
		R619	ORD0682F608	68 1/5W 5 TA26
		R620	ORD2201F608	2.2K 1/5W 5 TA26
		R621	ORD3300F608	330 1/5W 5 TA26
		R622	ORD3301F608	3.3K 1/5W 5 TA26
		R623	ORD6800F608	680 1/5W 5 TA26
		R624	ORD3301F608	3.3K 1/5W 5 TA26
		R625	ORD8201F608	8.2K 1/5W 5 TA26
		R626	ORD1001F608	1.0K 1/5W 5 TA26
		R627	ORD1002F608	10K 1/5W 5 TA26
		R628	ORD1001F608	1.0K 1/5W 5 TA26
		R629	ORD1201F608	1.2K 1/5W 5 TA26
		R630	ORD1001F608	1.0K 1/5W 5 TA26
		R631	ORD1002F608	10K 1/5W 5 TA26
		R632	ORD1502F608	15K 1/5W 5 TA26
		R633	ORD2701F608	2.7K 1/5W 5 TA26
		R634	ORD1202F608	12K 1/5W 5 TA26
		R635	ORD8201F608	8.2K 1/5W 5 TA26
		R636	ORD3300F608	330 1/5W 5 TA26
		R637	ORD3300F608	330 1/5W 5 TA26
		R638	ORD3902F608	39K 1/5W 5 TA26
		R639	ORD4701F608	4.7K 1/5W 5 TA26
		R640	ORD1501F608	1.5K 1/5W 5 TA26

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S	AL	LOC.A.NO	PART NO(GS)	SPECIFICATION
		R641	ORD1001F608	1.0K 1/5W 5 TA26
		R642	ORD6200F608	820 1/5W 5 TA26
		R643	ORD4702F608	47K 1/5W 5 TA26
		R644	ORD4702F608	47K 1/5W 5 TA26
		R645	ORD1501F608	1.5K 1/5W 5 TA26
		R646	ORD1002F608	10K 1/5W 5 TA26
		R647	ORD1501F608	1.5K 1/5W 5 TA26
		R648	ORD2201F608	2.2K 1/5W 5 TA26
		R649	ORD1001F608	1.0K 1/5W 5 TA26
		R650	ORD6801F608	6.8K 1/5W 5 TA26
		R651	ORD3302F608	33K 1/5W 5 TA26
		R652	ORD1002F608	10K 1/5W 5 TA26
		R653	ORD6800F608	680 1/5W 5 TA26
		R654	ORD1801F608	1.8K 1/5W 5 TA26
		R655	ORD6801F608	6.8K 1/5W 5 TA26
		R658	ORD2701F608	2.7K 1/5W 5 TA26
		R701	ORD4700F608	470 1/5W 5 TA26
		R702	ORD0182F608	18 1/5W 5 TA26
		R703	ORD1002F608	10K 1/5W 5 TA26
		R704	ORD2700F608	270 1/5W 5 TA26
		R705	ORD8200F608	820 1/5W 5 TA26
		R706	ORD1001F608	1.0K 1/5W 5 TA26
		R707	ORD5601F608	5.6K 1/5W 5 TA26
		R708	ORD2202F608	22K 1/5W 5 TA26
		R709	ORD1802F608	18K 1/5W 5 TA26
		R710	ORD1003F608	100K 1/5W 5 TA26
		R711	ORD8202F608	82K 1/5W 5 TA26
		R712	ORD4700F608	470 1/5W 5 TA26
		R713	ORD2202F608	22K 1/5W 5 TA26
		R714	ORD1003F608	100K 1/5W 5 TA26
		R715	ORD5601F608	5.6K 1/5W 5 TA26
		R716	ORD5601F608	5.6K 1/5W 5 TA26
		R717	ORD5601F608	5.6K 1/5W 5 TA26
		R718	ORD1802F608	18K 1/5W 5 TA26
		R719	ORD2202F608	22K 1/5W 5 TA26
		R720	ORD1502F608	15K 1/5W 5 TA26
		R722	ORD1502F608	15K 1/5W 5 TA26
		R723	ORD1801F608	1.8K 1/5W 5 TA26
		R724	ORD3900F608	390 1/5W 5 TA26
		R801	ORD0102F608	10 1/5W 5 TA26
		R802	ORD2701F608	2.7K 1/5W 5 TA26
		R807	ORD1202F608	12K 1/5W 5 TA26
		R808	ORD1000F608	100 1/5W 5 TA26
		R809	ORD1000F608	100 1/5W 5 TA26
		R810	ORD3304F608	3.3M 1/5W 5 TA26
		R814	ORD3304F608	3.3M 1/5W 5 TA26
		R815	ORD5601F608	5.6K 1/5W 5 TA26
		R816	ORD1501F608	1.5K 1/5W 5 TA26
		R817	ORD4700F608	470 1/5W 5 TA26
		R818	ORD3900F608	390 1/5W 5 TA26
		R820	ORD2202F608	22K 1/5W 5 TA26
		R821	ORD3302F608	33K 1/5W 5 TA26
		R823	ORD1003F608	100K 1/5W 5 TA26
		R824	ORD1803F608	180K 1/5W 5 TA26
		R825	ORD1802F608	18K 1/5W 5 TA26
		R826	ORD8201F608	8.2K 1/5W 5 TA26
		R827	ORD4701F608	4.7K 1/5W 5 TA26
		R830	ORD2202F608	22K 1/5W 5 TA26
		R831	ORD4701F608	4.7K 1/5W 5 TA26
		R832	ORD4701F608	4.7K 1/5W 5 TA26
		R835	ORD6800F608	680 1/5W 5 TA26
		R839	ORD6800F608	680 1/5W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R841	ORD1000F608	100 1/6W 5 TA26
		R842	ORD1000F608	100 1/6W 5 TA26
		R845	ORD4701F608	4.7K 1/6W 5 TA26
		R846	ORD6801F608	6.8K 1/6W 5 TA26
		R847	ORD0472F608	47 1/6W 5 TA26
		R848	ORD4702F608	47K 1/6W 5 TA26
		R849	ORD0102F608	10 1/6W 5 TA26
		R850	ORD0102F608	10 1/6W 5 TA26
		R861	ORD1003F608	100K 1/6W 5 TA26
		R862	ORD1003F608	100K 1/6W 5 TA26
		R870	ORD4701F608	4.7K 1/6W 5 TA26
		R871	ORD6801F608	6.8K 1/6W 5 TA26
		R872	ORD0472F608	47 1/6W 5 TA26
		R873	ORD4702F608	47K 1/6W 5 TA26
		R874	ORD0102F608	10 1/6W 5 TA26
		R875	ORD0102F608	10 1/6W 5 TA26
		R876	ORD1003F608	100K 1/6W 5 TA26
		R877	ORD1003F608	100K 1/6W 5 TA26
		R878	ORD6800F608	680 1/6W 5 TA26
		R879	ORD1503F608	150K 1/6W 5 TA26
		R880	ORD1503F608	150K 1/6W 5 TA26
		R882	ORD1203F608	120K 1/6W 5 TA26
		R883	ORD3903F608	390K 1/6W 5 TA26
		R884	ORD1003F608	100K 1/6W 5 TA26
		R885	ORD6801F608	6.8K 1/6W 5 TA26
		R886	ORD1001F608	1.0K 1/6W 5 TA26
		R887	ORD3903F608	390K 1/6W 5 TA26
		R888	ORD8202F608	82K 1/6W 5 TA26
		R889	ORD1001F608	1.0K 1/6W 5 TA26
		R890	ORD7500F608	750 1/6W 5 TA26
		R891	ORD3903F608	390K 1/6W 5 TA26
		R892	ORD8202F608	82K 1/6W 5 TA26
		R893	ORD1001F608	1.0K 1/6W 5 TA26
		R894	ORD7500F608	750 1/6W 5 TA26
		R896	ORD2702F608	27K 1/6W 5 TA26
		R897	ORD1201F608	1.2K 1/6W 5 TA26
		R899	ORD1202F608	12K 1/6W 5 TA26
		R901	ORD1801F608	1.8K 1/6W 5 TA26
		R902	ORD1801F608	1.8K 1/6W 5 TA26
		R903	ORD1801F608	1.8K 1/6W 5 TA26
		R904	ORD1801F608	1.8K 1/6W 5 TA26
		R905	ORD2201F608	2.2K 1/6W 5 TA26
		R906	ORD2201F608	2.2K 1/6W 5 TA26
		R907	ORD1001F608	1.0K 1/6W 5 TA26
		R908	ORD1001F608	1.0K 1/6W 5 TA26
		R909	ORD6800F608	680 1/6W 5 TA26
		R910	ORD4700F608	470 1/6W 5 TA26
		R911	ORD1201F608	1.2K 1/6W 5 TA26
		R912	ORD1000F608	100 1/6W 5 TA26
		R913	ORD1000F608	100 1/6W 5 TA26
		R914	ORD0752F608	75 1/6W 5 TA26
		R915	ORD0752F608	75 1/6W 5 TA26
		R916	ORD0752F608	75 1/6W 5 TA26
		R917	ORD0752F608	75 1/6W 5 TA26
		R918	ORD0752F608	75 1/6W 5 TA26
		R919	ORD1003F608	100K 1/6W 5 TA26
		R920	ORD0752F608	75 1/6W 5 TA26
		R921	ORD1500F608	150 1/6W 5 TA26
		R922	ORD5602F608	56K 1/6W 5 TA26
		R923	ORD5602F608	56K 1/6W 5 TA26
		R924	ORD1802F608	18K 1/6W 5 TA26
		R925	ORD1802F608	18K 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R926	ORD5602F608	56K 1/6W 5 TA26
		R927	ORD5602F608	56K 1/6W 5 TA26
		R928	ORD1001F608	1.0K 1/6W 5 TA26
		R929	ORD1203F608	120K 1/6W 5 TA26
		R930	ORD1003F608	100K 1/6W 5 TA26
		R931	ORD1802F608	18K 1/6W 5 TA26
		R932	ORD1802F608	18K 1/6W 5 TA26
		R933	ORD1003F608	100K 1/6W 5 TA26
		R934	ORD1203F608	120K 1/6W 5 TA26
		R935	ORD1001F608	1.0K 1/6W 5 TA26
		R936	ORD1001F608	1.0K 1/6W 5 TA26
		R937	ORD1203F608	120K 1/6W 5 TA26
		R938	ORD1203F608	120K 1/6W 5 TA26
		R939	ORD1203F608	120K 1/6W 5 TA26
		R940	ORD1203F608	120K 1/6W 5 TA26
		R941	ORD1001F608	1.0K 1/6W 5 TA26
		R942	ORD1001F608	1.0K 1/6W 5 TA26
		R943	ORD1001F608	1.0K 1/6W 5 TA26
		R944	ORD1202F608	12K 1/6W 5 TA26
		R945	ORD1202F608	12K 1/6W 5 TA26
		R946	ORD1202F608	12K 1/6W 5 TA26
		R947	ORD1202F608	12K 1/6W 5 TA26
		R948	ORD1002F608	10K 1/6W 5 TA26
		R949	ORD1002F608	10K 1/6W 5 TA26
		R950	ORD5600F608	560 1/6W 5 TA26
		R951	ORD5600F608	560 1/6W 5 TA26
		R952	ORD1002F608	10K 1/6W 5 TA26
		R953	ORD1002F608	10K 1/6W 5 TA26
		R954	ORD5600F608	560 1/6W 5 TA26
		R955	ORD5600F608	560 1/6W 5 TA26
		R956	ORD2702F608	27K 1/6W 5 TA26
		R957	ORD3902F608	39K 1/6W 5 TA26
		R958	ORD1001F608	1.0K 1/6W 5 TA26
		R959	ORD1001F608	1.0K 1/6W 5 TA26
		R960	ORD0752F608	75 1/6W 5 TA26
		R961	ORD1001F608	1.0K 1/6W 5 TA26
		R962	ORD1001F608	1.0K 1/6W 5 TA26
		R963	ORD5603F608	560K 1/6W 5 TA26
		R964	ORD3302F608	33K 1/6W 5 TA26
		R965	ORD1000F608	100 1/6W 5 TA26
		R966	ORD1502F608	15K 1/6W 5 TA26
		R967	ORD1502F608	15K 1/6W 5 TA26
		RP01	614-007A	2.7/2W CEMENT SMPS V
		RP02	ORD4702F608	47K 1/6W 5 TA26
		RP03	ORD4702F608	47K 1/6W 5 TA26
		RP04	ORD5101F608	5.1K 1/6W 5 TA26
		RP05	ORD0752F608	75 1/6W 5 TA26
		RP06	ORD1202F608	12K 1/6W 5 TA26
		RP07	ORD2201F608	2.2K 1/6W 5 TA26
		RP08	ORD1800F608	180 1/6W 5 TA26
		RP09	ORD1800F608	180 1/6W 5 TA26
		RP10	ORN3301F408	3.3K 1/6W 1 TA26
		RP11	ORN2701F408	2.70K 1/6W 1% TA26
		RP12	ORD3300F608	330 1/6W 5 TA26
		RP13	ORD2201F608	2.2K 1/6W 5 TA26
		RP14	ORD1001F608	1.0K 1/6W 5 TA26
		RP15	ORD1001F608	1.0K 1/6W 5 TA26
		RP16	ORD2702F608	27K 1/6W 5 TA26
		RP17	ORD1202F608	12K 1/6W 5 TA26
		RP18	ORD4701F608	4.7K 1/6W 5 TA26
		RP19	ORD2201F608	2.2K 1/6W 5 TA26
		RP20	ORD1002F608	10K 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		RP21	ORD0222F608	22 1/6W 5 TA26
		RP22	ORS0470K619	0.47OHM 2W 5% TR
		RP23	ORD6801F608	6.8K 1/6W 5 TA26
		RP24	ORS3302K619	33K 2W 5% TR
		RP25	ORD2200F608	220 1/6W 5 TA26
		RP26	ORD2202F608	22K 1/6W 5 TA26
		RP27	ORD1003F608	100K 1/6W 5 TA26
		RP29	ORS3302K619	33K 2W 5% TR
		RP30	ORD5600F608	560 1/6W 5 TA26
		RP32	ORD1201F608	1.2K 1/6W 5 TA26
		RP33	ORD1201F608	1.2K 1/6W 5 TA26
		RP34	ORD5601F608	5.6K 1/6W 5 TA26
		RP36	ORD1002F608	10K 1/6W 5 TA26
		RP37	ORD2700F608	270 1/6W 5 TA26
		RP38	ORD2700F608	270 1/6W 5 TA26
		RP39	ORD2700F608	270 1/6W 5 TA26
		RP40	ORD2700F608	270 1/6W 5 TA26
		RP41	ORD2701F608	2.7K 1/6W 5 TA26
		RP42	ORD2701F608	2.7K 1/6W 5 TA26
		RP99	ORD0222F608	22 1/6W 5 TA26